Paul McFedries

SIMPLY EXCEL 2010



Step-by-step introduction to Excel 2010



Concise, jargon-free instructions

Packed with screenshots in full-colour



Make It Simple For Yourself

SIMPLY EXCEL® 2010

by Paul McFedries



First published under the title Excel 2010 Simplified, ISBN 978-0-470-57763-9 by **Wiley Publishing, Inc.,** 10475 Crosspoint Boulevard, Indianapolis, IN 46256

Copyright © 2010 by Wiley Publishing, Inc., Indianapolis, Indiana

This edition first published 2010. Copyright © 2010 for the EMEA adaptation: John Wiley & Sons, Ltd.

Registered office

John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, United Kingdom

For details of our global editorial offices, for customer services and for information about how to apply for permission to reuse the copyright material in this book please see our website at www.wiley.com.

The right of the author to be identified as the author of this work has been asserted in accordance with the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, except as permitted by the UK Copyright, Designs and Patents Act 1988, without the prior permission of the publisher.

Microsoft product screenshots reprinted with permission from Microsoft Corporation.

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

Designations used by companies to distinguish their products are often claimed as trademarks. All brand names and product names used in this book are trade names, service marks, trademarks or registered trademarks of their respective owners. The publisher is not associated with any product or vendor mentioned in this book. This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold on the understanding that the publisher is not engaged in rendering professional services. If professional advice or other expert assistance is required, the services of a competent professional should be sought. All prices correct at time of going to press. Please check appropriate website for current details.

All website information was correct at the time of going to press. Websites do constantly update their privacy settings and policies. Please check the relevant website homepage to find their current policies.

ISBN 978-0-470-71131-6

A catalogue record for this book is available from the British Library.

Printed in Italy by Printer Trento

Permissions

Corbis Digital Stock Digital Vision PhotoDisc/Getty Images Purestock

Publisher's Acknowledgements

Some of the people who helped bring this book to market include the following:

Editorial and Production

VP Consumer and Technology Publishing Director: Michelle Leete
Associate Director – Book Content Management: Martin Tribe
Associate Publisher: Chris Webb
Executive Commissioning Editor: Birgit Gruber
Publishing Assistant: Ellie Scott
Production Manager: Amie Jackowski Tibble
Project Editor: Juliet Booker
Development Editor: Shena Deuchars

Composition Services:

Layout: Beth Brooks, Andrea Hornberger Series Designer: Patrick Cunningham Indexer: Potomac Indexing, LLC

Marketing:

Senior Marketing Manager: Louise Breinholt Marketing Executive: Chloe Tunnicliffe

About the Author

Paul McFedries is a technical writer who has been authoring computer books since 1991. He has more than 60 books to his credit, which together have sold more than three million copies worldwide. These books include the Wiley titles *Teach Yourself VISUALLY Excel 2010, Teach Yourself VISUALLY Microsoft Office 2008 for Mac, Excel 2010 Visual Quick Tips,* and *Excel 2010 PivotTable and PivotCharts Visual Blueprint.* Paul also runs Word Spy, a Web site dedicated to tracking new words and phrases (see www.wordspy.com). Please visit Paul's personal Web site at www.mcfedries.com.

Author's Acknowledgments

The book you hold in your hands is not only an excellent learning tool, but it is truly beautiful, as well. I am happy to have supplied the text that you will read, but the gorgeous layout comes from Wiley's crack team of designers and screen artists. The layout of the tasks, the accuracy of the spelling and grammar, and the veracity of the information are all the result of hard work performed by project editor Lynn Northrup and technical editor Namir Shammas. Thanks to both of you for your excellent work. My thanks, as well, to executive editor Jody Lefevere for asking me to write this book.

How to Use This Book

Who Needs This Book

This book is for the reader who has never used this particular technology or software application. It is also for readers who want to expand their knowledge.

The Conventions in This Book

Steps

This book uses a step-by-step format to guide you easily through each task. Numbered steps are actions you must do; bulleted steps clarify a point, step, or optional feature; and indented steps give you the result.

Notes

Notes give additional information – special conditions that may occur during an operation, a situation that you want to avoid, or a cross reference to a related area of the book.

Icons and Buttons

lcons and buttons show you exactly what you need to click to perform a step.

Tip and Warning Icons

Tips offer additional information, including tips, hints, and tricks. You can use the tip information to go beyond what you have learned in the steps. Warnings tell you about solutions to common problems and general pitfalls to avoid.

Bold

Bold type shows command names, options, and text or numbers you must type.

Italics

Italic type introduces and defines a new term.

WORKING WITH EXCEL

- 4 Getting to Know Excel
- 6 Start Excel
- 8 Tour the Excel Window
- 9 Work with Excel's Ribbon
- Customise the Quick Access Toolbar
- 2 Customise the Ribbon
- 4 Work with Smart Tags
- 6 Change the View
- 48 Configure Excel Options

2

ENTERING AND EDITING EXCEL DATA

- 22 Learning the Layout of a Worksheet
- 23 Understanding the Types of Data You Can Use
- 24 Enter Text into a Cell
- 26 Enter a Number into a Cell
- 28 Insert a Symbol
- 30 Edit Cell Data
- 32 Delete Data from a Cell

BANGES WORKING WITH EXCEL



- 36 Select a Range
- **38** Fill a Range with the Same Data
- 40 Fill a Range with a Series of Values
- 42 Move or Copy a Range
- 44 Insert a Row or Column
- 46 Insert a Cell or Range
- 48 Delete Data from a Range
- 50 Hide a Row or Column
- 52 Freeze Rows or Columns
- 54 Merge Two or More Cells
- 56 Transpose Rows and Columns
- 58 Define or Change a Range Name
- 60 Use Worksheet Text to Define a Range Name
- 62 Navigate a Workbook Using Range Names



FORMATTING EXCEL RANGES

- 66 Change the Font and Font Size
- 68 Apply Font Effects
- 70 Change the Font Colour
- 72 Align Text Within a Cell
- 74 Center Text Across Multiple Columns
- 76 Rotate Text Within a Cell
- 78 Add a Background Colour to a Range
- 80 Apply a Number Format
- 82 Apply an AutoFormat to a Range
- 84 Apply a Conditional Format to a Range
- 86 Apply a Style to a Range
- 88 Change the Column Width
- 90 Change the Row Height
- 92 Wrap Text Within a Cell
- 94 Add Borders to a Range

5

BUILDING FORMULAS AND FUNCTIONS



- 98 Understanding Excel Formulas
- Build a Formula
- **102** Understanding Excel Functions
- 104 Add a Function to a Formula
- Add a Row or Column of Numbers
- **108** Build an AutoSum Formula
- Add a Range Name to a Formula
- **112** Reference Another Worksheet Range in a Formula
- Move or Copy a Formula

CONTENTS

MANIPULATING EXCEL WORKSHEETS

- Create a New Worksheet
- 120 Move a Worksheet
- **122** Copy and Rename a Worksheet
- **124** Delete a Worksheet
- 126 Change the Gridline Colour
- **128** Toggle Worksheet Gridlines On and Off
- 129 Toggle Worksheet Headings On and Off



DEALING WITH EXCEL WORKBOOKS



116

- I32 Create a New Blank Workbook
- **134** Create a New Workbook from a Template
- Save a Workbook
- 137 Open a Workbook
- **138** Arrange Workbook Windows
- I 40 Find and Replace Text in a Workbook
- 142 Modify Workbook Colours
- I 44 Set Workbook Fonts
- 146 Choose Workbook Effects
- **148** Apply a Workbook Theme



ANALYSING EXCEL DATA

- **I52** Sort a Range
- I 54 Filter a Range
- **I 56** Set Data Validation Rules
- **I 58** Convert a Range to a Table
- 60 Create a Data Table
- **62** Summarise Data with Subtotals



VISUALISING DATA WITH EXCEL CHARTS

- **166** Examining Chart Elements
- **167** Understanding Chart Types
- 68 Create a Chart
- **I70** Add Chart Titles
- Add Data Labels
- **172** Position the Chart Legend
- **173** Display Chart Gridlines
- **174** Display a Data Table
- **175** Change the Chart Layout and Style
- **176** Format Chart Elements
- **178** Customise a Chart Element Background
- **180** Set a Chart Element's Outline
- **182** Add Effects to a Chart Element
- **184** Apply a Style to a Chart Element



15

COLLABORATING WITH OTHER PEOPLE



- **188** Add a Comment to a Cell
- **190** Protect a Workbook
- **192** Share a Workbook with Other Users
- 194 Track Workbook Changes
- 196 Accept or Reject Workbook Changes
- **198** Make a Workbook Compatible with Earlier Versions of Excel
- 200 Collaborate on a Workbook Online

INDEX



CONTENTS

- 4 Getting to Know Excel
- 6 Start Excel
- 8 Tour the Excel Window
- 9 Work with Excel's Ribbon
- Customise the Quick Access Toolbar
- **12** Customise the Ribbon
- **14** Work with Smart Tags
- 6 Change the View
- **18** Configure Excel Options

WORKING WITH EXCEL

You use Microsoft Excel to create *spreadsheets*, which are documents that enable you to manipulate numbers and formulas to quickly create powerful mathematical, financial, and statistical models. In this chapter, you learn about Excel and you find out the kinds of tasks you can perform with Excel. You also learn how to start the program and you take a tour of the program's major features. This chapter also shows you how to work with the Excel Ribbon, how to customise the Ribbon and the Quick Access Toolbar, how to work with smart tags, and how to customise the view and other aspects of the program.



GETTING TO KNOW EXCEL

Working with Excel involves two basic tasks: building a spreadsheet and then manipulating the data on the spreadsheet. Building a spreadsheet involves adding data, formulas, and functions. Manipulating data involves calculating totals, working with series, creating tables for your data, and visualising data in charts.

This section gives you an overview of these tasks. You learn about each task in greater detail as you work through the book.

Build a Spreadsheet

Add Data

You can insert text, numbers, and other characters into any cell in the spreadsheet. Click the cell that you want to work with and then type your data in the Formula bar. This is the large text box above the column letters. Your typing appears in the cell that you selected. When you are done, press **Enter**. To edit existing cell data, click the cell and then edit the text in the Formula bar.

| | 110 | | Se . | |
|---|---------|-----------------|------|-----------|
| | | A | | 8 |
| 1 | Loan Da | ata | | |
| z | Annu | al Interest Ra | te | 6.00% |
| 5 | Amortia | sation (in year | rs) | 15 |
| ŧ | | Loan Princip | al | \$500,000 |
| 5 | | | | |
| ε | | | | |

Add a Formula

A *formula* is a collection of numbers, cell addresses, and mathematical operators that performs a calculation. In Excel, you enter a formula in a cell by typing an equals sign (=) and then the formula text. For example, the formula **=BI-B2** subtracts the value in cell B2 from the value in cell B1.

Add a Function

A *function* is a predefined formula that performs a specific task. For example, the AVERAGE function calculates the average of a list of numbers and the PMT function calculates a loan or mortgage payment. You can use functions on their own, preceded by =, or as part of a larger formula. Click **Insert Function** (**I**) to see a list of the available functions.



| | Product | Defects D | ataba | 60 | |
|----|-----------|-------------------|---------|-------|--------------|
| 4 | Wartgroup | Group Leader | Defents | Units | 1. Defeative |
| 3 | 8. | Hammond | | 000 | 4.8% |
| 4 | | Brimsen | 4 | 445 | 8.9% |
| 5 | ¢ | Reiby | 14 | 1.625 | 4.9% |
| | D. | Michanbion | 5 | 1,450 | 8.29 |
| ÷. | 8 | Ourbin | .0 | 167 | 3.3% |
| | F | COntraction | 30 | 1.029 | 1.6% |
| | | AACAACEL! | | 1,900 | -VEMODIT-D |

Manipulate Data

Calculate Totals Quickly

If you just need a guick sum of a list of numbers, click a cell below the numbers and then click the **Sum** button ($\overline{\Sigma}$), which is available in the Home tab of Excel's Ribbon. You can also select the cells that you want to sum and their total appears in the status bar.

Fill a Series

Excel enables you to save time by completing a series of values automatically. For example, if you need to enter the numbers 1 to 100 in consecutive cells, you can enter just the first few numbers, select the cells, and then click and the lower right corner to fill in the rest of the numbers. Most programs als in dates and the names of week days and months.

Manage Tables

The row-and-column format of a spreadsheet makes the program suitable for simple databases called *tables*. Each column becomes a field in the table and each row is a record. You can sort the records, filter the records to show only certain values, and add subtotals.

Add a Chart

A chart is a graphic representation of spreadsheet data. As the data in the spreadsheet changes, the chart also changes to reflect the new numbers. Excel offers a wide variety of charts, including bar charts, line charts, and pie charts.

| d c so | drag fill | * 7 # | | - | 9 |
|-----------|--------------------|------------|------|-----------------|--------------|
| | c | > | 6 | | |
| NVICE | ESALES PR | 064015 | DW-C | RDERS | |
| and a | Participant of the | distant of | | No. Passa | and a second |
| 10.775 | Bruthal stand | 18 | 1.07 | R. D. Ballowith | 10 Deaths |
| 10.00 | Core Lines | | 1.1 | AD DriveDree | runk Wegnuin |

su





START EXCEL

Before you can perform tasks such as adding data and building formulas, you must first start Excel. This brings the Excel window onto the Windows desktop and you can then begin using the program. This task and the rest of the book assume that you have already installed Excel 2010 on your computer.

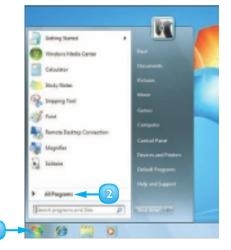
When you have finished your work with Excel, you should shut down the program. This reduces clutter on the desktop and in the taskbar, and it also conserves memory and other system resources.

Click **Start**.

The Start menu appears.



The App Programs menu appears.



Click Microsoft Office.



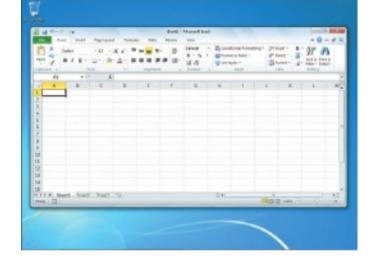
The Microsoft Office menu appears.

Click Microsoft Excel 2010.



The Microsoft Excel window appears on the desktop.

Note: When you are finished with Excel, close the program by clicking the **File** tab and then clicking **Exit**.



 \square

After you have used Excel a few times, it should appear on the main Start menu in the list of your most-used programs and you can click that icon to start the program. You can force the Excel icon onto the Start menu by following Steps I to 3, right-clicking the Microsoft Excel 2010 icon and clicking Pin to Start Menu. If you are using Windows 7, you can click Pin to Taskbar to add the Excel icon to the taskbar.

TOUR THE EXCEL WINDOW

To get up to speed quickly with Excel, it helps to understand the various elements of the Excel window. These include standard window elements such as the title bar and status bar, as well as Office-specific elements such as the Ribbon and the File tab.

\Lambda Title Bar

The title bar displays the name of the current workbook.

B Quick Access Toolbar

This area gives you one-click access to a few often-used features. To learn how to customise this toolbar, see "Customise the Quick Access Toolbar."

C Excel Window Controls

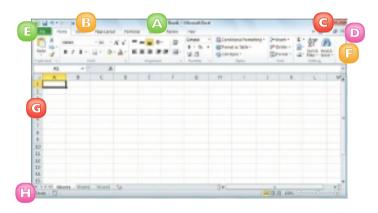
You use these controls to minimise, maximise, restore and close Excel's application window.

Workbook Window Controls

You use these controls to minimise, maximise, restore, and close the current workbook window.

File Tab

Click this tab to access file-related commands, such as Save and Open.



Ribbon

This area gives you access to all of Excel's commands, options and features. To learn how to use this element, see "Work with Excel's Ribbon."

G Worksheet

This area displays the current worksheet and it is where you will do most of your Excel work.

🖪 Status Bar

This area displays messages about Excel's current status, the results of certain operations and other information.

WORK WITH EXCEL'S RIBBON

You use Excel's Ribbon element to access all of the program's features and commands. The *Ribbon* is the horizontal strip that runs across the top of the Excel window, just below the title bar. The Ribbon is organised into various tabs, such as File, Home and Insert, and each tab contains related controls, which usually include buttons, lists, and check boxes. There is no menu bar in Excel, so you do not use pull-down menus to access commands.

Click the tab that contains the Excel feature you want to work with.

Excel displays the controls in the tab.

- Each tab is organised into groups of related controls, and the group names appear here.
- In many groups you can click the dialog box launcher button (20) to see group settings.
- 2 Click the control for the feature.
 - If the control displays a list of options, click the option you want.

Excel runs the command or sets the option.



| 1 11 11 11 11 11 11 11 11 11 11 11 11 1 | | Beeld + b | foreash load | | | | - COM | 1 and the |
|--|-------------------|-------------|------------------------------------|-------------|-----|---------|----------|-----------|
| the state inter | Ingringent Annual | Below | TAN . | | | | + 0 | - # 0 |
| | | past in | la santa a Si santa a Si kan | anna - Illi | | | une - 55 | integ - |
| As. 2 | - | r | e B | N 1 | 1 | c | | A) |
| and a second sec | | | | | | | | |
| <u>^</u> | Aa 1 Aa 1 | | | | | | | |
| As Az | Early Early | | | | | | | |
| Bautra Pite | An An | | | | | | | |
| Brownie Beert. Ber Garnel Beert. | | | | D4 | 140 | 1 189 C | 0 | 1 |

0

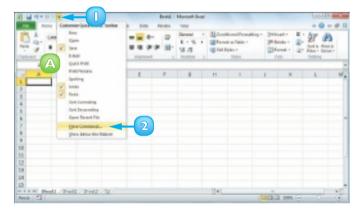
CUSTOMISE THE QUICK ACCESS TOOLBAR

You can make Excel easier to use by customising the Quick Access Toolbar to include the Excel commands you use most often. You run Quick Access Toolbar buttons with a single click, so adding your favourite commands saves time. By default, the Quick Access Toolbar contains three buttons, Save, Undo and Redo, but you can add any of Excel's hundreds of commands.

Since there is only so much room for the Quick Access Toolbar in Excel's menu bar, consider moving the Quick Access Toolbar below the Ribbon to gain more space for your custom commands.

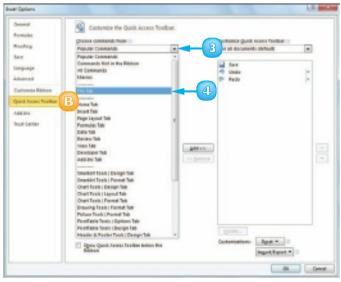


- If you see the command you want, click it and skip the rest of the steps in this section.
- Click More Commands.



The Excel Options dialog box appears.

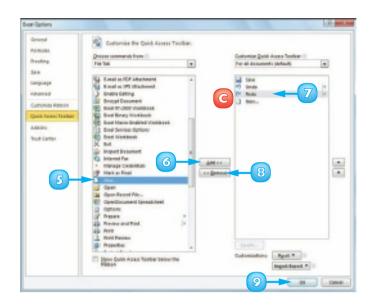
- B Excel automatically displays the Quick Access Toolbar tab.
- Click the Choose commands from .
- 4 Click the command category you want to use.



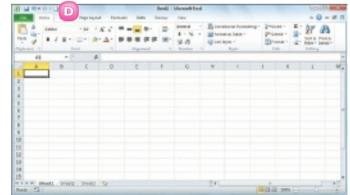
 \bigcirc

- 5 Click the command you want to add.
- Olick Add.
 - G Excel adds the command.
 - To remove a command, click it.
- 8 Click Remove.
- 💿 Click **OK**.

7



Excel adds a button for the command to the Quick Access Toolbar.



 \checkmark

You can move the Quick Access Toolbar below the Ribbon to give it the full width of the Excel window, so you can add many more buttons. Click the Customize Quick Access Toolbar button (=) and then click Show Below the Ribbon. You can add a button directly from the Ribbon. Click the Ribbon tab that contains the command, right-click the command, and then click Add to Quick Access Toolbar. Excel inserts a button for the command on the Quick Access Toolbar.

CUSTOMISE THE RIBBON

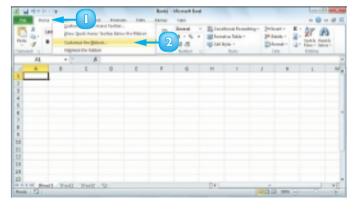
You can improve your Excel productivity by customising the Ribbon with extra commands that you use frequently. The default Ribbon contains eight tabs and each of those tabs contains dozens of commands in the form of buttons, galleries, lists, and other controls. However, Excel has many other commands available and you may wish to add one or more of these other commands if you use any of them frequently.

To add a new command to the Ribbon, you must first create a new tab or a new group within an existing tab and then add the command to the new tab or group.

Display the Customize Ribbon Tab

Right-click any part of the Ribbon.

Click Customize the Ribbon.

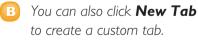


Add a New Tab or Group

The Excel Options dialog box appears.



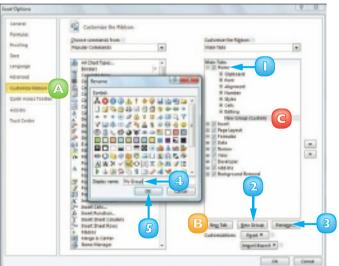
Click the tab you want to customise.







- 3 Click **Rename**.
- 4 Type a name for the group.
- Glick **OK**.



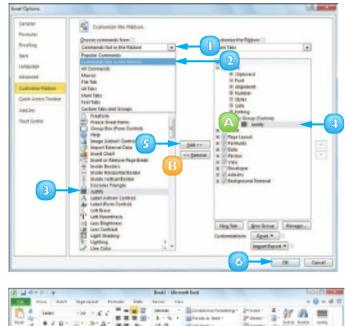


Add a Command

- Click the Choose commands from ⊡.
- 2 Click the command category you want to use.
- Click the command you want to add.
- Click the custom group or tab you want to use.
- 🕝 Click **Add**.

A Excel adds the command.

- To remove a custom command, click it and then click **Remove**.
- 6 Click OK.
 - G Excel adds the new group and command to the Ribbon.



| 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | Beeril 114 | creat her | 6 | | | 10 | 0.0 |
|--|----------------|---------|------------|-----------|--|---------------------------------------|------------|-------|------|
| the best hart the | ingent termste | inter 1 | batter 1 | 141 | | | | | 0-01 |
| 100 - 100 100 - 100 100 - 100 100 100 100 100 100 100 100 | 8·A· | | 11.16 | · 10** | national formation mat.a. (anto 1 ingen 1 ingen 2 | Panas - Panas - Sanas - Colo | 1 . M | inted | |
| A4 - (* | | | | | | | | | C |
| A 8 0 | 0 | 8 | F. | 6 | * | 1 | 8 | L | W. |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 1 | | | | | | | | | |
| 3 | | | | | | | | | |
| 1 | | | | | | | | | |
| | | | | | | | | | |
| 5.0 | | | | | | | | | |
| 50 | | | | | | | | | |
| 12 | | | | | | | | | |
| 53 | | | | | | | | | |
| 24 | | | | | | | | | |
| 15 | - | | | | 114 | | | | - |
| Read Street 1. Provid 1. 274 | 10.30 | | | | 0. | (WITH | A 1999 (-) | | 1 |

Excel tool tabs appear only when you select an Excel object. You can add custom groups and commands to any tool tab. Right-click any part of the Ribbon, click Customize the Ribbon. Click the Customize the Ribbon □ and then click Tool Tabs. Click the tab you want and then follow the steps in this section to customise it. Right-click any part of the Ribbon and then click Customize the Ribbon. To restore a tab, click it, click Restore Defaults, and then click Restore only selected Ribbon tab. To remove all customisations, click Restore Defaults and then click Restore all Ribbon tabs and Quick Access Toolbar customizations.

WORK WITH SMART TAGS

You can make your Excel work faster and easier by taking advantage of smart tags. A *smart tag* is a special icon that appears when you perform certain Excel tasks, such as pasting data and using the AutoFill feature. Clicking the smart tag displays a list of options that enable you to control or modify the task you just performed. Some smart tags appear automatically in response to certain conditions. For example, if Excel detects an inconsistent formula, it displays a smart tag to let you know.

Perform an action that displays a smart tag, such as copying and pasting a cell.



The smart tag appears.

- Click the smart tag.
 - B The smart tag displays a list of its options.

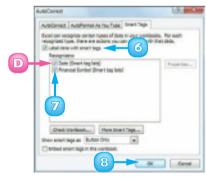
| 1 | A | | ¢. | 0 | | | - 4 | н | 1 | 1 | - E | 5 | M | |
|----------------|-------------------|--|-----------|---|-------|-------|-----|-----|---|-----|------------|----|---|----|
| 1 | | - 1 | | | | 1 | | | | | | | | |
| 2 made | et 2010 | _ | | | Budge | 2000 | | | | | | | | |
| A | | | | | | 唐104+ | | | | | | | | |
| 4 | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | |
| 9 7 | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | |
| 1.0 | | | | | | | | | | | | | | |
| 11. | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| 10 24 24 | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| 14- | | | | | | | | | | | | | | |
| No. or No. | thead 1. / Fred | | | | | | | Bel | | | | | | 1 |
| Brief dealer | after textures; B | of the local division of the local divisiono | one links | | | | | | | No. | 1.11 1.00% | 8- | - | 10 |

| A B C | 0 8 | 7 4 | н | 1 1 | 8 | . A | N. | 1 |
|---|---------|--------------------|-----|-----|------------|-----|-----|-----|
| a line doesn't had too ! | and and | 3444 | | | | | | |
| * Wydget 2010 | CANES. | 2000 | | | | | | |
| 4 | | C CH | (2) | | | | | |
| 5 | | Pade 14 | | | | | | |
| 9 | | 2 5 7 1 | | | | | | |
| 2 | | 日田道 | | | | | | |
| 8 | | Paster Values | B | | | | | |
| 4 | | 101 102, 103 | | | | | | - 1 |
| 10 | | time Party Option. | | | | | | |
| 12 | | 5-22 | | | | | | |
| 11 | | | | | | | | |
| 44. 34. 34. 34. 34. | | | | | | | | 1 |
| 14 | | | | | | | | |
| 16 | | | | | | | | - 1 |
| 17 A & A & Bentl / Ford / Ford / Second / Second | | | Bel | _ | | _ | | e" |
| Tarted dedication and press BPBI or discuss Fails | | | | 100 | ER 23 1994 | 8 | 0-0 | 1. |

- 3 Click the option you want to apply.



- To turn on extra smart tags, click
 File, Options, Proofing,
 AutoCorrect Options.
- Click the Smart Tags tab.
- 6 Click the Label data with smart tags check box (changes to).
- Click the check box beside each smart tag in the **Recognizers** list (changes to).
 - The Date smart tag recognises a worksheet date and offers options such as scheduling a meeting on that date.



B Click **OK**.

CHANGE THE VIEW

You can adjust the Excel window to suit what you are currently working on by changing the view to match your current task. Excel offers three views: Page Layout displays worksheets as they would appear if you printed them out; Page Break Preview displays the page breaks as blue lines; and Normal is useful for building and editing worksheets.

Switch to Page Layout View

Click the **View** tab.

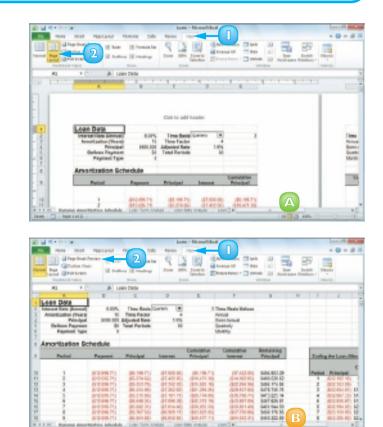


You can also click the Page Layout button (^[]).

Excel switches to Page Layout view.

Switch to Page Break Preview

- Click the **View** tab.
- 2 Click Page Break Preview.
 - Pou can also click the Page Break Preview button ().



- G The Welcome to Page Break Preview dialog box appears.
 - Excel switches to Page Break Preview.

B) Click **OK**.

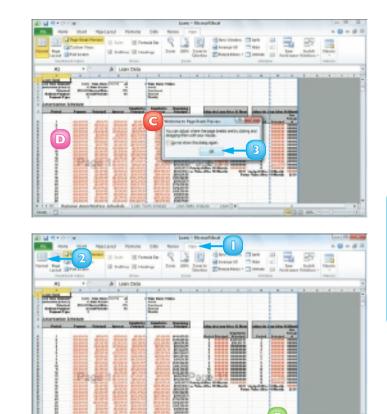
Switch to Normal View



2 Click Normal.



Excel switches to Normal view.



 \checkmark

A page break shows where a new page begins when you print a worksheet. When you switch to Page Break Preview, Excel displays the page breaks as blue lines. If a page break occurs in a bad position – for example, the page break includes headings but not the cells below the headings – you can use your mouse ▷ to click and drag the page breaks to new positions.

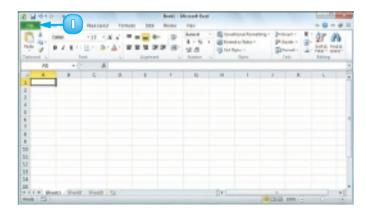
Full Screen view is useful when you want to see the maximum amount of a worksheet on the screen. Full Screen view removes many of the Excel window features, including the File button, Ribbon, Quick Access Toolbar, Formula bar, and status bar. To return to the Normal view, press Esc or click the Restore Down button (a). 7

CONFIGURE EXCEL OPTIONS

You can customise Excel and set up the program to suit the way you work by configuring the Excel options. You use these options to set your Excel preferences in a number of program categories, including formulas, proofing, and saving.

To use these options, you must know how to display the Excel Options dialog box, which contains controls such as check boxes, option buttons, and lists that enable you to configure many aspects of Excel.

Click the **File** tab.







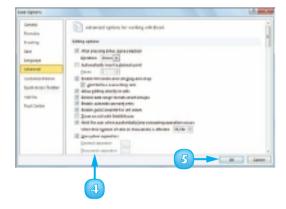
The Excel Options dialog box appears.

- 3 Click a tab on the left side of the dialog box to choose the configuration category you want to work with.
 - The controls that appear on the right side of the dialog box change according to the tab you select.
 - B Excel offers pop-up descriptions of some – but, unfortunately, not all – of the options. Pop-up help is available for options that have a small "i" in a circle. Hover the mouse ▷ over the option and Excel displays a pop-up description after a second or two.
- 4 Use the controls on the right side of the dialog box to configure the options you want to change.
- 💪 Click **OK**.

Excel puts the new options into effect.

Right-click the Ribbon and then click Customize Ribbon to open the Excel Options dialog box with the Customize Ribbon tab displayed. You can also open the Excel Options dialog box by pressing At+F and then pressing 1.





CONTENTS

- 22 Learning the Layout of a Worksheet
- 23 Understanding the Types of Data You Can Use
- 24 EnterText into a Cell
- 26 Enter a Number into a Cell
- 28 Insert a Symbol
- 30 Edit Cell Data
- 32 Delete Data from a Cell



ENTERING AND EDITING EXCEL DATA

Are you ready to start using Excel to build a spreadsheet? To create a spreadsheet in Excel, you must understand the layout of an Excel worksheet as well as the types of data that you can enter into a worksheet. You also must know how to enter data – including text, numbers, dates, times, and symbols – into the worksheet cells and how to edit that data to fix typos, adjust information, and remove data you no longer need.



LEARNING THE LAYOUT OF A WORKSHEET

In Excel, a spreadsheet file is called a **workbook** and each workbook consists of one or more **worksheets**. These worksheets are where you do most of your work in Excel – including entering your data and formulas – so you need to know the layout of a typical worksheet.

A cell is a box into which you enter your spreadsheet data.

B Column

A *column* is a vertical line of cells. Each column has a unique letter that identifies it. For example, the leftmost column is A and the next column is B.

C Row

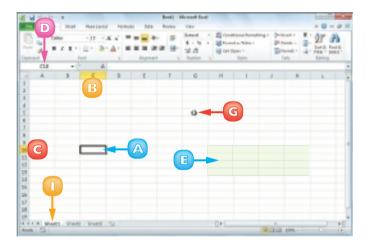
A *row* is a horizontal line of cells. Each row has a unique number that identifies it. For example, the topmost row is 1 and the next row is 2.

Cell Address

Each cell has an *address*, which is determined by the letter and number of the intersecting column and row. For example, the cell at the intersection of column C and row 10 has the address C10.

🖪 Range

A *range* is a rectangular grouping of two or more cells. The range address is given by the address of the top left cell



and the address of the bottom right cell. H12:K13 is an example of a range of cells; it refers to all of the cells selected between column H, cell 10 and column K, cell 13.

Worksheet Tab

The worksheet tab displays the worksheet name. Most workbooks contain multiple worksheets and you use the tabs to navigate between the worksheets.

G Mouse Pointer

Use the Excel mouse \bigcirc to select cells.

UNDERSTANDING THE TYPES **OF DATA YOU CAN USE**

To build a spreadsheet in Excel, it helps to understand the three main types of data that you can enter into a cell: text, numbers and dates and times.

Text

Text entries can include any combination of letters, symbols, and numbers. You will mostly use text to describe the contents of your worksheets. This is very important because even a modest-sized spreadsheet can become a confusing jumble of numbers without some kind of text guidelines to keep things straight. Most text entries are usually labels such as Sales or Territory that make a worksheet easier to read.

| However, text entries can also be text/number | combinations for | r items such as | phone numbers and |
|---|------------------|-----------------|-------------------|
| account codes. | | | |

Numbers

Numbers are the most common type of Excel data. The numbers you enter into a cell can be money values, weights, interest rates, temperatures, or any other numerical quantity. In most cases you just

type the number that you want to appear in the cell. However, you can al a pound sign (f) or other currency symbol to indicate a monetary value o percent sign (%) to indicate a percentage value.

Dates and Times

Date entries appear in spreadsheets that include dated data, such as invoices and sales. You can either type out the full date – such as 23 August 2010 – or use the forward slash (/) or hyphen (-) as a date

separator – such as 23/8/2010 or 23-8-2010. Note that the order in which you enter the date values depends on your regional settings. For example, in the United Kingdom, the format is day/ month/year. For time values, you use a colon (:) as the separator, followed by either AM or PM, such as 9:15 AM.

| | | 0 | 6 |
|-----|---------------|------------------------------|----------------------|
| 1 | Category Name | Product Name | Quantity Per Unit |
| 2 | Deverages | Chai | 10 boxes x 20 bags |
| 3 | Beverages | Chang | 24 - 12 oz bottles |
| 4 | Beverages | Chartreuse verte | 750 cc per bottle |
| 5 | Beverages | Côte de Blaye | 12 - 75 cl bottles |
| 4 | Beverages | Ipoh Coffee | 16-500 g tins |
| 7 | Beverages | Lakkalikööri | 500 ml |
| 8 | Beverages | Laughing Lumberjack Lager | 24 - 12 oz bottles |
| 9 | Beverages | Outback Lager | 24 - 355 ml bottles |
| 15 | Beverages | Rhänbriku Klosterbier | 24-0.5 bottles |
| 13 | Beverages | Sasquatch Ale | 24 - 12 oz bottles |
| 12 | Beverages | Steeleye Stout | 24 - 12 oz bottles |
| 13 | Condiments | Aniseed Syrup | 12 - 550 ml bottles. |
| 1.4 | Condiments | Chef Anton's Cajun Seasoning | 48 - 6-c2 jars |
| 15 | Condiments | Genen Shouya | 24 - 250 ml bottles |

Loan Data

| lso precede a number with |
|---------------------------|
| or follow a number with a |
| |
| |
| |

Annual Interest Sate Amerthation (in years)

Loss Principal (500.0)

| | | | 6 | -1 | 1 | P |
|----|--------------------|-------------------|-----------|-----------|---------------|--------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 2 | 100 | - Desc | - Dest | - Desc | - First | trees. |
| 4 | NE SUPERIOR OF STR | month and | 1100.0075 | 8.000 | ALC: N 10 | 7.85 |
| | If beginning 2010 | | | | | 746 |
| ۴. | 18 Instantian 2010 | designed and | D-B-BPH | 0.04076 | 0.040 PM | 2.68 |
| а. | In Squarman state | manine and | 0.000 | ACCOUNTS. | 10000 | 1.00 |
| | 17 Supported The | the second second | 1100000 | 0.0000 | Committee and | 1.00 |

ENTER TEXT INTO A CELL

Your first step when building a spreadsheet is usually to enter the text data that defines the spreadsheet's labels or headings. This is particularly important if other people will be reading or editing the spreadsheet, because the labels and headings help people make sense of the data and help them understand the purpose of the spreadsheet.

Most labels appear in the cell to the right or above where the data will appear, while most headings appear at the top of a column of data or to the left of a row of data.

 Click the cell in which you want to enter the text.

Excel marks the current cell by surrounding it with a thick, black border.





- Excel opens the cell for editing and displays the text as you type.
- B Your typing also appears in the Formula bar.

Note: Rather than typing the text directly into the cell, you can also type the text into the Formula bar.

| 1 4 9-9 | 1-1+ | - | | Bead | I - Microalt | Excel . | | | | | (ne)d | |
|-------------------|---------|----------------------------|-----------|-------|--------------|---------|---------|-----------------------|----------|-----------------------------|-------|-----|
| 10. 10 | to past | THE LOCAL | Parente : | 2004 | Ranan 1 | - | | | | | - 0 | - # |
| And A | | - 14 - × × → □ - 1 3- ▲ | | P E U | 54.43 | 1.1 | S CH IN | an Tables - Balles | Po DA | and - const - const - | 「加」の | |
| 62 | | 345 10 | erest | В | | | | | | | | |
| 4 A 2 3 4 5 | | 3 - 2 | | | , | | | н | | | | |
| 6 7 | | | | | | | | | | | | |

3

When your text entry is complete, press **Enter**.

G If you do not want Excel to move the selection, click Enter (✓) or press Ctrl + Enter instead.

| Excel | closes | the | cell | for | editing. |
|-------|--------|-----|------|-----|----------|
|-------|--------|-----|------|-----|----------|

If you pressed Enter, Excel moves the selection to the cell below.

| 1 1 9- | (F - 14 | | | Fred | I - Microsoft | Excel | | | | (na) R | |
|------------------|-------------------|------------|-------------|--------|--------------------------------------|-------|--|----|----------------------------|------------------------------|------|
| 10. 1 | test past | THE LANSA | Parmatel | 2151 | Ranan 1 | - | | | | | 10.1 |
| Not of | Gener B 2 10 - | C | - 00 | 10 III | Second S - 15 Sil 23 Number | | rend is 1929 - 1 Dytes - 1 Dytes | P | orant - orana - Data | 1. 17 12. 1011 1. 1010 | |
| 62 | *(| 34 p in | tareat Rete | | | | | | | | |
| A 16 | 8 | C | 0 | | | 4 | H | E. | 1 | к. | |
| 8 9 8 7 | | | | | | | | | | | |
| 8 2 | | | | | | | | | | | |
| | | (1944) (12 | 2 | | | - 24 | | | | | - |

| | - (1 1944 | | THE LANS | Partnetes | | - Moseaft Ex | - | | | - O - | 4.1 |
|--------------|--------------|---------------|----------|-----------|---|--|------------------|--|------------|------------|-----|
| Parte Option | 3 . | | A | | 1 | Seveni - S - S - Si dS Summer - | igness igness | Hanai Asmalling + K Is 1929 + Mai + Dolos | Points | 2 - Sata - | |
| | 60 | 4 (h) | ş. | | | | | | | - | |
| | A | | c | 0 | | | a | н | 6 J | к. | |
| 1 | | | | | | | | | | | |
| 2 | | Indenest Ruce | | | | | | | | | |
| 3 | | | | | | | | | | | |
| 4 | | | | | | | | | | | |
| 5 | | | | | | | | | | | |
| 6 | | | | | | | | | | | |
| 7 | | | | | | | | | | | |
| 8 | | | | | | | | | | | |
| 9 | | | | | | | | | | | |
| 10 | | | | | | | | | | | |
| | | et / 19440 / | Sheet | 2.1 | | | DAT | | - | | ×. |
| Ecoly. | 21 | | | | | | | 1.00 | 23 ANA (C) | | -00 |

 $\overline{\checkmark}$

When you have finished adding data to a cell, press it to close the current cell for editing and move the selection to the next cell on the right. If you prefer to move left instead, press i; if you prefer to move up, press i. If the letters you type at the start of a cell match the contents of another cell in the worksheet, Excel's AutoComplete feature fills in the full text from the other cell under the assumption that you are repeating the text in the new cell. If you want to use the text, click \checkmark or press Enter; otherwise, just keep typing your text.

ENTER A NUMBER INTO A CELL

Excel is all about numbers, so most of your worksheets will include numeric values. Some worksheets store only numeric values, but most use numbers as the basis for one or more calculations, such as monthly loan payments, statistical analysis, or budget totals.

To get the most out of Excel, you need to know how to enter numeric values, including percentages and currency values.

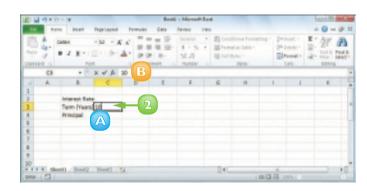
 Click the cell in which you want to enter the number.

Excel marks the current cell by surrounding it with a thick, black border.

- 2 Start typing your number.
 - A Excel opens the cell for editing and displays the number as you type.
 - B Your typing also appears in the Formula bar.

Note: Rather than typing the number directly into the cell, you can also type the number into the Formula bar.

| 10 | 19-1 | | | | Fredd | - Microalt Ex | or ho | | | | (44) 8 | - |
|----------------------------|------|--|---|-----------|-------|---------------|-------|---|------|----------------|--|-----|
| 16 | 1.12 | to past | THEFT ANY | Parinalia | 2101 | Margan 10 | - | | | | | - # |
| Tester Option | | 1.000 1.00 1.00 1.00 | - u - K II- b- 4 | | - | 5-5- | 18ho | editional Annuali Rol as table * Dyles * Dyles | 49.° | Provents - | 1 - 11 - 12 - 12 - 12 - 12 - 12 - 12 - | |
| | C3 | 4 (1 | A. | | | | | | | | | |
| 1 2 8 4 5 6 7 | A | B Indexect Rat Term (News Principal | | | | | 4 | н | | | E | |
| 8 9 10 8 4 5 8 | | ett./9480 | 946.5 | 0 | | | 24 | | - 0. | 1 2 405 (C) | - | - |



When your number is complete, press Enter.

If you do not want Excel to move the selection, click **Enter** () or press **Ctrl**+**Enter** instead.

Excel closes the cell for editing.

- C To enter a percentage value, type the number followed by a percent sign (%).
- To enter a currency value, type the pound sign (£) or dollar sign (\$) followed by the number.

Many Excel worksheets include dates, such as the number of days an invoice is overdue.

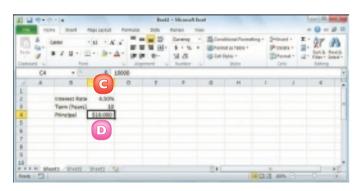
4 Click the cell in which you want to enter the date.

You can also enter a time in the format hour:minute:second AM/ PM; for example, 3:15:00 PM.

 $\overline{\checkmark}$

If your number is in the thousands, you can include the thousands separator (,) within the number. For example, you can enter 10,000, which is easier to read than 10000. You can include the decimal point (.) when you type a value. If your numeric value is negative, precede the value with a minus sign (-).

| | * - 17 144 Paul | THE LOCAL | Partness 2 | Real - Money | A Loos | | | | - | |
|---|---|-----------|------------|---|--------|---------|---|--------|--------|-----|
| | | | | 2 Groad 2 5 - 5 5 - 5 5 - 5 5 - 5 5 - 5 5 - 5 | | State 1 | | Points | - 2-12 | A A |
| C) A 1 2 8 4 5 5 6 | B Indeseet Ra Tarm (Fear Principal | | | | | 4 | н | I | 8 | 8 |
| 7 8 9 13 10 10 10 10 10 10 10 10 10 10 10 10 10 | | . 946 . Q | | | | 240 | | 12 101 | 0 0 | 1 |





To enter the same number again, select the cell directly below the value you want to repeat and then press Ctrl + . Excel adds the value to the cell.

INSERT A SYMBOL

You can make your Excel worksheets more readable and more useful by inserting special symbols that are not available via your keyboard's standard keys. These special symbols include foreign characters such as \ddot{o} and \acute{e} , mathematical symbols such as \div and ∞ , financial symbols such as \notin and ¥, commercial symbols such as © and @, and many more.

- Click the cell in which you want the symbol to appear.
- 2 Type the text that you want to appear before the symbol, if any.
- 3 Click the **Insert** tab.
- Olick Symbol.

| 1 | 10100.00 | Ŧ | | 50040 - 1 | Accession for | 08 | | | (nordal | |
|---------------------|----------|----------------------|------------------------|-------------------|---------------|-------|---------------------------------------|--|---------|---------|
| - | 10.04 | Part Part | and Assus | Cata Review | 1986 | | | | + 0 | 0 # 8 |
| 01-1 | 4. CAN | 100 | - K Z 3- <u>4</u> - | | 5 - 5 5 21 | 1 100 | read to Table 1 Styles - Styles | Street- Street- Street- Street- | | PA Sent |
| | ALI | * * X V | A This work | book to Coppright | | | | | | |
| 1965 H 1 7 15 15 15 | | 0 h to Coppelgite | -2 | 0 | E | , | 5 | | , | |
| 38. 39 | * sheets | 29492.394 | a. N | | | D+C | | 14. 225.2 | 5 | +1 |

| (2) 1 - 1 - 1 - 1 - 1 | 0.4 | | 5004 | Manager | CHORE: | | | | - Carela | |
|--|-----------------------|-------------|----------------------|----------------------|--|------|-------|-------|----------|--------|
| the state | 2.45 | 3 | ri Cata tava | v vien | | | | | + 0 - | 0.00.0 |
| Realities Cart | Palar Chi al | Donaryhot - | 200-00 | itter - he Osek - | No. of the second secon | | | 4 | 11 IL 10 | |
| 3040 | Pulled. | | Crue: | | Sparitorian | (ano | 1.040 | 107 | 14 | 18.51 |
| AL3 | | V & Newed | Accels in Corporight | | | _ | | | | _ |
| 13 54 55 | D En la Coppelgite | c | 0 | E | | 4 | | | , | |
| 56 37 38 39 11 11 8 Sheet 884 | ti /946294 | et Al | | | D+L | | 1904 | 105.1 | | *[|

The Symbol dialog box appears.

- 5
- Click the **Symbols** tab.
- 6 Click the symbol you want to insert.

Note: Many other symbols are available in the Webdings and Wingdings fonts. To see these symbols, click the **Font** $\$ and then click either **Webdings** or **Wingdings**.



Click **Insert**.

Excel inserts the symbol.

- 8 Repeat Steps **6** and **7** to insert any other symbols you require.
- Olick **Close**.





 \checkmark

You can use the keyboard to enter symbols you use frequently. In the Symbol dialog box, click 🗹 in the from list and select ASCII (decimal). Click the symbol you want to insert and then examine the Character code text box. You can enter the symbol via the keyboard by holding down All, pressing 0, and then typing the number in the Character code text box. For example, you can enter the © symbol by pressing Alt+0169. Be sure to type all the numbers using your keyboard's numeric keypad.

EDIT CELL DATA

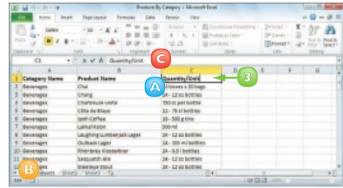
Once you enter text, a number, a date, or a time into a cell, that cell data is not set in stone. If the data you entered into a cell has changed or is incorrect, you can edit the data to the updated or correct value. You can edit cell data either directly in the cell or by using the Formula bar.

- Click the cell in which you want to edit the text.
- Press E2.

You can also double-click the cell you want to edit.

- Excel opens the cell for editing and moves the cursor to the end of the existing data.
- Excel displays Edit in the status bar.
- G You can also click inside the Formula bar and edit the cell data there.
- Make your changes to the cell data.

| £, | a sector la | Reptore B | s Category + Microsoft Excel | | 0.8 0 |
|------|---------------|---------------------------|---|-------------------------------|----------|
| | Name Joseft | Pagelayeut Parmular Ceta | limiter view | | |
| 1000 | 9 E | | Senaral · El Construction Francisco · S · S, · El Construction Inter- · L. J. · · · · · · · · · · · · · · · · · · | Print - Print - Print - | R - 27 A |
| | C1 + (| A Quantity/Unit | | | |
| | A | 8 | t () | E F | 6 |
| 4 | Category Name | Preduct Name | Quantity/Ents | | |
| 1 | deverages. | Chai | Miteness a Mitage | | |
| 3 | developed . | chung | 34-12 at hottles | | |
| 4 | mercenages. | chartreuse verte | TRO of per bottle | | |
| 5 | Beverages. | Côte de Blaye | 32-79 of bottles | | |
| 6 | Generaper | lpeh-Ceffee | 36-500 g tito | | |
| 7 | deverapes | Lakkalikson | 300-ml | | |
| | Emostages. | Laughingtoumbergacktuager | 24-12 as bottles | | |
| 9 | deverages. | Cluther Lager | 34-335 milletites | | |
| 10 | Generapes | Rhönbriss Kinsterbier | 24-0.5 I bottles | | |
| 11 | Severaper . | Sequetch alle | 34-12 str bottles | | |
| | Benefapel | Tradings Tout | 34-12 Ki bottive | | 0 |
| line | e 21 | | 1.00 | CE 20 ARA (C) | |





When you finish editing the data, press Enter.

Note: If you do not want Excel to move the selection, click Enter (☑) or press Ctrl + Enter instead.

Excel closes the cell for editing. If you pressed Enter, Excel moves the selection to the cell below.

You can move 🗘 over the cell

you want to edit and centre 🗘 over the character where you

want to start editing. Double-

click the mouse. Excel opens

positions the cursor at the spot

the cell for editing and

where you double-clicked.

| É. | terr inst | | a By Category + Microsoft Excel a Directory view | | | 0-01 |
|-------|-----------------|-----------------------------|---|---|---|----------|
| IL NO | A | | P Annu + Bland | tional Formatting - et as Table - UNL - UNHS | Detriat * Detriat * Eliferation Catt | 8 - 27 A |
| | č1 • | 🗧 🗙 🖌 🖞 Duantity For Unit | | | | |
| | A | 0 | c | D | 8 F | 6 |
| 1 | Category Name | Preduct Name | Quantity Per Unit | | | |
| 1 | deverages. | Chui | Kibman a Mibaga | | | |
| 3 | district appeal | chung | 24-12 at bothes | | | |
| 6 | Concentrages. | Chartenuos vesta | TRO of per bottle | | | |
| 6 | Beverages. | Côte de Blaye | 32-79 al legities | | | |
| 6 | Generaper | tpeh-Cettee | 36-588 g tiro | | | |
| 7 | deverapes . | Lakkalikson | \$00 ml | | | |
| 8 | Develages. | Laughting cumber jack sager | 24-12 as botties | | | |
| 9 | Severages | Clutherin Lager | 34-305 milletitles | | | |
| 10 | Generapes | Khishinke Kissterbier | 34-9.5 i bottles | | | |
| 11 | timo rapos | Saequardh Alle | 34-12 to bottles | | | |
| | Emostapos. | State myst 200-4 | 24-12 63 BODTHS | | | |
| | ** Bwett / 94 | er avera and | 54. | | 121-000C-) | |

| £. | a area a | | Category + Microsoft Excel | | | Lois |
|------|------------------|---|---|-----------|--|-------------------|
| _ | nene beat | Pegelayeut Fermules Dela | linter view | | | ú () = Ø t |
| 1000 | 4 | | tenent · El Constrone • 5 - 5 • El Constrone 1.1.2 · Sont Prematent 1.1.2 · Sont Prematent · Sont | lateler = | Deleter - Sh Deleter - El Promat - | E . 27 A |
| | ci • | A 20 hours = 20 hags. | | | | |
| | A | 8 | c | D | 8 F | 6 |
| 1 | Category Name | Product Name | Quantity Par Unit | | | |
| 3 | Generapet | Chai | Miteraes a 30/bags | | | |
| 3 | Beverapss | chung | 34-12 as bothes | | | |
| 4 | Barcenages. | Chartreuse-verter | TRO-oc per botthe | | | |
| 8 | Bevoragos | cète de Blaye | 32-76 cl bottles | | | |
| 6 | Generaper | lpeh-Ceffee | 36-588 g 1/m | | | |
| 7 | dervorages | Lakkalikson | 300-ml | | | |
| 8 | Emontages. | rankyskinnepelatkrafes | 38-12 ## Bolties | | | |
| 9 | Severages | Outback Lager | 34-308 miterities | | | |
| 10 | Gevenapes | Khitribrika Kitoberbiler | 24-0.5 i bottles | | | |
| 11 | Severages | Sasquardh Alle | 34-12 so bothes | | | |
| | anostages | Steeleyethout 2 . West's . 10 | 24-12 as bottles | | | |
| | e 21 | | | 1 100 | (2) 205. (C) | |

If you make a mistake and the cell edit was the last action you performed in Excel, press Cm+2 or click the Undo button ()) in the Quick Launch Toolbar. If you have performed other actions in the meantime, click the Undo and then click the edit in the list that appears. However, this will undo the other actions you performed after the edit.

DELETE DATA FROM A CELL

If your worksheet has a cell that contains data you no longer need, you can delete that data. This helps to reduce worksheet clutter and makes your worksheet easier to read. If you want to delete data from multiple cells, you must first select those cells; see "Select a Range" in Chapter 3.

Delete Cell Data

Select the cell that contains the data you want to delete.

| 1 1 1 1 | (prix.)# | | Espanae - Men | soft Exat | | | 101-8 | 100 |
|---------|--------------------------|-------------------|----------------------|----------------|---|-------------------------------------|----------|------|
| 100 | None Incart Pag | niagent Fermulas | Deta liminar | Ver | | | | - 01 |
| | 0.000 | | | S · Street | tronal Pormatting * tracTable * (MS * (2018) | Prinat * Philade * Eliminat * | N. N. S. | A |
| 04 | +0. | A c- Heave | sheckl | | | | | |
| - A | | 0 | D | 10 | P I | 0 | H I | |
| 2 | INCREASE | 1.08 | Please check? | -0 | | | | |
| 5 | EXPENSES | January | Pelerwary | Marsh | Total | | | |
| 8 | Advertising | 4,680 | 4,280 | 5,300 | 14.800 | | | |
| 7 | Rent | 2.180 | 2.180 | 2,300 | 6.300 | | | |
| 8 | Supplies | 1,580 | 5.280 | 1,400 | 3.900 | | | |
| 2 | Sularies | 16,080 | 16,080 | 36,500 | 49,500 | | | |
| 10 | Wallates . | 580 | 680 | 808 | 1,700 | | | |
| 11 | 2818 TOTAL | 24,580 | 24,180 | 25,800 | 74,400 | | | |
| 9 | | | | | | | | |
| 1 | 2811 BUDGET | 26.765 | 26.289 | 20,122 | 81,096 | | | - |
| | manager, - pre court the | Property and pole | ALC: MUSIQUE - 218 Y | AND THE COURSE | | - | _ | |

- 2 Click the **Home** tab.
- 3 Click **Clear** (2).
- Olick Clear Contents.

Note: You can also delete cell data by pressing **Del**.



Excel removes the cell data

| 1 | - DAN - | | | nam · Bildon | thonal Formatting * at as Table * Zohi * | Print - Piteter - Bronst - | | |
|------|--------------------|-----------------|-----------|--------------|--|----------------------------------|---|--|
| | D8 + (* | 4 | | | | | | |
| | A B | 0 | D | | F | 0 | H | |
| 1 20 | pense Budget Calcu | letion - 1st Qa | arter | | | | | |
| 3 | INCREASE | 2.08 | | | | | | |
| 4 | | | | | | | | |
| 5 | EXPENSES | January | Palanuary | Marsh | Tatal | | | |
| 6 | Advertising | 4,680 | 4,200 | 5,300 | 54,800 | | | |
| 7 | Rent | 2.180 | 2.180 | 2,300 | 6.300 | | | |
| 8 | Supplies | 5.080 | 1,280 | 1.400 | 3.900 | | | |
| 2 | Salarias | 16,080 | 16,080 | 36,500 | 49,500 | | | |
| 18 | WellBles | 580 | 680 | 600 | 1,700 | | | |
| 71 | 2818 TOTAL | 24,880 | 24,180 | 28,800 | 74,400 | | | |
| 12 | | | | | | | | |
| -0 | 2811 BUDGET | 26,785 | 26,269 | 26,122 | 81,095 | | | |
| 74 | | | | | | | | |

Undo Cell Data Deletion

Click the **Undo** .

Click Clear.

Note: If the data deletion was the most recent action you performed, you can undo it by pressing Cm + Z or by clicking Undo ().

Excel restores the data to the cell.

| 10 000 | | -2 | | Menorh Exat | | | | 0-0 | |
|--------|--|------------|----------|-------------|---|------------------------------------|--------|-----------|-------|
| 10.00 | ng 'n Name stands' in 20 ng 1.04 in (3) ann mign. E Algeneemt | · # # | N N- 3 | | otronal Formatting - net as Table - Zotes - 10(19) | (Prinat - Philippinat - Call | N 19.7 | AT A DATE | 10.00 |
| (Ind | e1Adier | A c- Heate | sheekt | | | | | | |
| - A | | 0 | D | 1 | P | 0 | H | 1 | |
| | EXPENSES | January | Pelanary | | tetal | | | | |
| | Advertising | 4,680 | 4,280 | 5,300 | 54,800 | | | | |
| - | Rent | 2,180 | 2.180 | 2,300 | 6.300 | | | | |
| | Supplies | 1.580 | 1,280 | 1.400 | 1.900 | | | | |
| | Salarias | 16,080 | 16,080 | 36,500 | 48,500 | | | | |
| | | MBO | 680 | 600 | 1,700 | | | | |
| | Validies | | | | 74.000 | | | | |
| 1 | 2810 10106 | 24,580 | 24,180 | 25,800 | 76,800 | | | | |
| 1 | | 24,580 | 24,180 | 28,800 | 81,096 | | | | |



You can delete a cell's formatting while leaving the data intact. Select the cell, click Home, click *and* then click Clear Formats.

You can delete both the data and the formatting from a cell. Select the cell, click Home, click and then click Clear All.

ω

CONTENTS

- 36 Select a Range
- 38 Fill a Range with the Same Data
- 40 Fill a Range with a Series of Values
- 42 Move or Copy a Range
- 44 Insert a Row or Column
- 46 Insert a Cell or Range
- 48 Delete Data from a Range
- 50 Hide a Row or Column
- 52 Freeze Rows or Columns
- 54 Merge Two or More Cells
- 56 Transpose Rows and Columns
- 58 Define or Change a Range Name
- 60 Use Worksheet Text to Define a Range Name
- 62 Navigate a Workbook Using Range Names

8

WORKING WITH EXCEL RANGES

In Excel, a *range* is a collection of two or more cells that you work with as a group rather than separately. You can fill the range with values, move or copy the range, sort the range data, filter the range to show only certain values, insert and delete ranges, hide entire rows or columns, and merge two or more cells. You can make it easier to navigate worksheets and build formulas by applying a name to a range.



SELECT A RANGE

To work with a range in Excel, you must select the cells that you want to include in the range. After you select the range, you can fill it with data, move or copy it to another part of the worksheet, format the cells, delete the data, and so on. You can select a range as a rectangular group of cells, as a collection of individual cells, or as an entire row or column. It is almost always easiest to select a range using the mouse, but Excel does offer a few keyboard shortcuts for selecting ranges.

Select a Rectangular Range

- Position
 over the first cell you want to include in the range.
- Click and drag
 Over the cells that you want to include in the range.

Excel selects the cells.

 Release the mouse button to end the range selection.

Select a Range of Individual Cells

- Click in the first cell that you want to include in the range.
- 2 Hold down cm and click in each of the other cells that you want to include in the range.

Each time you click in a cell, Excel adds it to the range.

3 Release **C** to end the range selection.

| A | 8 | 0 | D | F | - 0 | н | 1 | 1 | - |
|-------------|-----------------------------|------|--------------------|-----|------|-----|---|---|---|
| | Title | Year | Director | | | | | | |
| 3 | Allen | 1979 | Ridley Scott | | | | | | |
| 4 | An Angxi from Texas | 1940 | Ray Emight | | | | | | |
| 5 | 54 | 1965 | Penny Mershall | | | | | | |
| 4 | The Big Sieep | 1945 | Howard Harvis | | | | | | |
| 7 | Sløde Rummer | 1982 | Ridley Scott | | | | | | |
| 1 | A Christmas Carol | 1951 | Brian Harot | | | | | | |
| 3 | Christmes in July | 1940 | Prepton Sturges | | | | | | |
| 10 | A Clockwork Orange | 1971 | Stanley Rubrick | | | | | | |
| 11 | Die Hard | 1991 | John McTieman | | | | | | |
| 12 | Old leonaldes | 19.5 | James Crupe | | | | | | |
| 10 | An Old Spanish Custom | 1995 | A frian Branel | | | | | | |
| 14 | A Perfect World | 1985 | Circ Eastwood | | | | | | |
| 15 | Perfectly Normal | 1990 | Type Schemeses | | | | | | |
| 16 | The Shining | 1980 | Stanley 6. vick | | | | | | |
| 17 | The Terminator | 1984 | James Care | -2 | | | | | |
| - | | | | | | | | | |
| 10 1 2 2 21 | Howie List / Sheet2 / Sheet | 100 | | 1.4 | | - 1 | | | n |
| Ready 2 | | | 65.465897 Count 48 | | 1000 | | | - | 5 |

| | A B | 0 | 0 | P | G. | H | 3 | 1 |
|---------|-----------------------------|------|-------------------|----|----|--------|-------|----|
| - | Title | Tear | Director | | | | | -[|
| n)- | Alien | 187 | 9 Bidley Scatt | | | | | |
| | An Angel from Texas | 184 | D Ray Enright | | | | | |
| 6 | Big | 189 | & Penny Marshall | | | | | |
| | The Big Sleep | 184 | 6 Wayned Waynes | | | | | |
| 2 – | Blade Runner | 189 | 2 Ridley Scatt | | | | | |
| | A Christmas Carel | 185 | d Brian Hunt | | | | | |
| 9 | Christmas in July | 184 | D Presson Stuges | | | | | |
| - | A Clackwark Grange | 187 | 1 Stanley Kubrick | | | | | |
| 2 - | Die Haed | 189 | t John McTiernae | | | | | |
| 1.00 | Old incesides | 182 | 6 James Cruze | | | | | |
| 13 | An Old Spanish Custane | 182 | 6 Adriae Beanel | | | | | |
| 10 | A Perfect Warld | 189 | Gint Eastwood | | | | | |
| 15 | Perfectly Narmal | 199 | O Yves Simoneau | | | | | |
| | The Shining | 189 | D Stanley Kubrick | | | | | |
| 2 - | The Terrisstar | 189 | 4 James Cameroe | | | | | |
| 15 | | | | | | | | |
| March I | Movie List / Start) / Start | 102/ | | 14 | | 1 2075 | | ą |

Select an Entire Row

Position
 over the header of the row you want to select.

 \bigcirc changes to \rightarrow .

Click the row header.

Excel selects the entire row.

To select multiple rows, click and drag across the row headers or hold down Cm and click each row header.

Select an Entire Column

Position
 over the header of the column you want to select.

 \bigcirc changes to \downarrow .

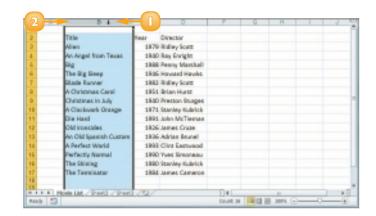
2 Click the column header.

Excel selects the entire column.

To select multiple columns, click and drag across the column headers or hold down Ciril and click each column header.

You can use the keyboard to select ranges. Navigate to the first cell that you want to include in the range, hold down Shift, and then press the arrow keys to extend the selection. To select an entire row, navigate to any cell in the row and press Shift + Spacebar. To select an entire column, navigate to any cell in the column and then press Ctrl + Spacebar.

| 8 | C | D | F | 8 | н | 1.1 | |
|-----------------------|------|-----------------|---|---|---|-----|---|
| Title | Year | Director | | | | | _ |
| Aler | 1979 | Ridley Scott | | | | | |
| An Angel from Texes | 1940 | Ray Emight | | | | | |
| 54 | 1968 | Penny Mershall | | | | | |
| The Big Sleep | 1946 | Howard Hawks | | | | | |
| Blade Rummer | 1982 | Ridley Scott | | | | | |
| A Christmas Carol | 1991 | Brien Harst | | | | | |
| Christmes in July | 1940 | Prestan Sturges | | | | | |
| A Clockwork Orange | 1971 | Stanley Rubrick | | | | | |
| Die Hard | 1991 | John McTieman | | | | | |
| Old isonaldes | 1925 | James Cruze | | | | | |
| An Old Spanish Custom | 1995 | Adrian Dranel | | | | | |
| A Perfect World | 1985 | Clint Eastwood | | | | | |
| Perfectly Normal | 1990 | Tyes Simpress | | | | | |
| The Shining | 1980 | Stanley Rubrick | | | | | |
| The Terminator | 1964 | James Cameron | | | | | |



To select every cell in the worksheet, press Cm+A or click the Select All button () in the upper left corner of the worksheet.

FILL A RANGE WITH THE SAME DATA

If you need to fill a range with the same data, you can save time by getting Excel to fill the range for you. The most common method for filling a range in this way is to use Excel's AutoFill feature, which makes it easy to fill a vertical or horizontal range with the same value. However, Excel also offers a method that enables you to fill any selected range.

See "Select a Range," earlier in this chapter, to learn how to select a range of cells.

Fill a Vertical or Horizontal Range

- In the first cell of the range you want to work with, enter the data you want to fill.
- 2 Position 🗘 over the bottom right corner of the cell.
 - \bigcirc changes to +.
- Click and drag + down to fill a vertical range or across to fill a horizontal range.
- 4 Release the mouse button.

Excel fills the range with the initial cell value.

| | A | 0 | C | D | 0 | | Ę |
|----|------------------|--|---------------------|---|---|----|---|
| 1 | Catego y Name | Product Name | Quantity Per Unit | | | | |
| 2 | Beverageo | 2 | stribower x 30 bags | | | | |
| 3 | | chang | 34-12 as bottles | | | | |
| 4 | | Chatteuse verse | 750 cc per bottle | | | | |
| 5 | | côte de alaye | 12 - 25 ci betties | | | | |
| Ē. | | lpoh coffee | se- sos grane | | | | |
| 7 | | Lakkalikoon | 500 mi | | | | |
| Ŀ | | Laughing Lumberjack Lager | 24 - 12 as bottles | | | | |
| 5 | | Dufback Lager | 34 - 255 mi bottles | | | | |
| Ű. | | Whorldrau electerbier | 24-0.5 bottles | | | | |
| 1 | | Saequatzh Alle | 24 - 12 as bottles | | | | |
| 2 | | and a second sec | 34-12 as bottles | | | | |
| 3 | | Geometry | 12-558 millipotties | | | | |
| A | F # Sheeti / Sta | chef Anton's Cajun Seasoning | HE-E-CO JAN | | | 12 | J |

| | A | B | C | D | E | 1 |
|------|------------------|------------------------------|----------------------|-----|---|---------|
| 1 | Category Name | Product Name | Quantity Per Unit | | | |
| 2 | Geverages | Chai | 10 becker x 20 bags | | | - |
| 3 | Geverages | Chang | 24 - 13 or bettles | | | |
| 4 | Geverages | Chartreuse verte | 758 cc per bottle | | | |
| 5 | Geverages | Citte de Blaye | 12 - 75 cl bottles | | | |
| 6 | Geverages | lpoh Coffee | 15 - 500 g tine | | | |
| 7 | Geverages | Lakkalikööri | 500 mil | | | |
| 8 | Geverages | Laughing Lumberjack Lager | 24 - 13 or bettles | | | |
| 9 | Geverages | Outback Leger | 24 - 255 milbettiles | | | |
| 30 | Geverages | Rhönbriku Kloeterbiler | 24-0.51 bettles | | | |
| 11 | Geverages | Seepuritch Alle | 24 - 13 or bettles | | | |
| 12 | Serverages | Steeleye Stout | 24 - 13 or bettles | | | |
| 15 | | RI need Syrup | 12 - 590 mi bettilee | | | |
| 54 | | Chef Anton's Cajun Seasoning | 48 - Siccijans | | | |
| 1.1 | in H Sheeti /She | HER / Sheets / EL | 14 | E | | + |
| PH I | a 53 | | Churt LL LE CE | 100 | | - (E) - |

Fill a Selected Range

- Select the range you want to fill.
- 2 Type the text, number, or other data.
- Bress Ctrl + Enter.

Excel fills the range with the value you typed.



| | - A | 8 | - C - | 0 | E | 1 | 6 | H | | _ J | 16 | |
|----|------------|---------|---------|------|--------|------------|----------|----------|---------|-----|----|----|
| 1 | | | | | | | | | | | | |
| 2 | Test Data: | | | | | | | | | _ | | |
| 3 | 9.5 | 6.5 | 0.5 | 9.5 | 6.5 | 9.5 | 6.5 | 0.8 | 9.5 | 6.5 | | |
| | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.3 | 0.5 | | |
| 5 | 0.5 | 6.5 | 0.5 | 0.5 | 6.5 | 0.5 | 6.5 | 0.5 | 0.5 | 0.5 | | |
| ۶. | 0.5 | 8.5 | 0.5 | 0.5 | 8.5 | 0.5 | 0.5 | 0.5 | 0.5 | 6.5 | | |
| 2 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.3 | 8.8 | 0.3 | 0.5 | 8.8 | | |
| | 0.5 | 6.5 | 0.5 | 0.5 | 6.5 | 0.5 | 6.5 | 0.5 | 0.5 | 6.5 | | |
| 2 | 9.5 | 6.5 | 0.5 | 9.5 | 8.5 | 9.5 | 0.5 | 0.5 | 9.5 | 6.5 | | |
| | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.3 | 0.5 | 0.5 | 0.3 | 8.5 | | |
| 1 | 0.5 | 6.5 | 0.5 | 0.5 | 6.5 | 0.5 | 8.5 | 0.5 | 0.5 | 0.5 | | |
| 2 | 9.5 | 8.5 | 0.5 | 0.5 | 8.5 | 9.5 | 0.5 | 0.5 | 0.5 | 6.5 | | |
| а. | 2.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 8.5 | | |
| 14 | 0.5 | 6.5 | 0.5 | 0.5 | 6.5 | 0.5 | 6.5 | 0.5 | 0.5 | 6.5 | | |
| 3 | 0.5 | 6.5 | 0.5 | 0.5 | 8.5 | 9.5 | 8.5 | 0.5 | 0.5 | 8.5 | | |
| | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.0 | | |
| 17 | 0.5 | 6.5 | 0.5 | 0.5 | 6.5 | 0.5 | 6.5 | 0.5 | 0.5 | 6.5 | | |
| 8 | | | | | | | | | | | | |
| | P.H. Ster | 11/2000 | 2./Seet | 5/3/ | _ | | 1941 | | 18 | | | |
| - | w 🖭 | | | | Avenue | 15 Count : | thi Same | 75 11 12 | LE LINK | R | 0 | -0 |

Fill a Range Without Copying Formatting

Perform Steps I to 4 to fill a vertical or horizontal range with data.

Excel displays the AutoFill Options smart tag (\bigcirc).

2 Click the AutoFill Options 🖸.

Click Fill Without Formatting.

Excel removes the original cell's formatting from the copied cells.



FILL A RANGE WITH A SERIES OF VALUES

If you need to fill a range with a series of values, you can save time by using Excel's AutoFill feature to create the series for you. AutoFill can fill a series of numeric values such as 5, 10, 15, 20, and so on; a series of date values such as 1 January 2011, 2 January 2011, and so on; or a series of alphanumeric values such as Chapter 1, Chapter 2, Chapter 3, and so on.

You can also create your own series with a custom step value, which determines the numeric difference between each item in the series.

AutoFill a Series of Numeric, Date, or Alphanumeric Values

- Click in the first cell and type the first value in the series.
- 2 Click in an adjacent cell and type the second value in the series.
- 3 Select the two cells.
- Position O over the bottom right corner of the second cell.

 \bigcirc changes to +.

- Click and drag + down to fill a vertical range or across to fill a horizontal range.
 - As you drag through each cell, Excel displays the series value that it will add to the cell.
 - Release the mouse button.
 - Excel fills the range with a series that continues the pattern of the initial two cell values.





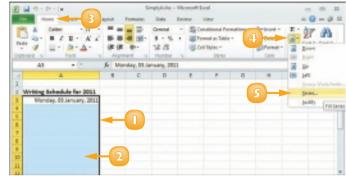
Click in the first cell and type the first value in the series 2 Select the range you want to fill, including the initial value. Click the **Home** tab. Click **Fill** (**I**). Click Series. The Series dialog box appears. In the Type group, select the type of series you want to fill (\bigcirc changes to \bigcirc). If you selected **Date** in Step 6, select an option in the **Date unit** group (\bigcirc changes to \bigcirc). 8 In the Step value text box, type the value you want to use. Click **OK**. Excel fills the range with the series you created. Create an AutoFill Series Click the File tab; Options, Advanced. Click Edit Custom Lists. Click **NEW LIST**.

Fill a Custom Series of Values

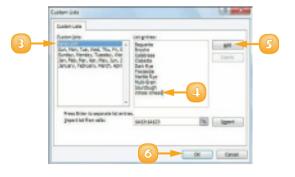
In the List entries box, type each item in your list. Press Enter after each item.











MOVE OR COPY A RANGE

You can restructure or reorganise a worksheet by moving an existing range to a different part of the worksheet. For example, if you have two related ranges that are far apart on the worksheet, you can move one of them so that the ranges are closer to each other.

You can also make a copy of a range, which is a useful technique if you require a duplicate of the range elsewhere or if you require a range that is similar to an existing range.

Move a Range

- Select the range you want to move.
- Position
 over any outside border of the range.
 - 🗘 changes to 🐄.
- Click and drag the range to the new location.

 \bigcirc changes to \Diamond .

- Excel displays an outline of the range.
- B Excel displays the address of the new location.
- Release the mouse button.

Excel moves the range to the new location.



| | A | | 0 | 0 | | E | E P | E F O | E P Q H | E P Q H I | E P Q H I V |
|----|------------------------|-------------|----------|------------|-----|---|-----|-------|---------|-----------|-------------|
| í. | Loan Payment Ana | alysis | | | | | | | | | |
| 6 | Interest Rate (Annual) | 6.00% | | | | | | | | | |
| | Periods (Nears) | | | | | | | | | | |
| | Principal | \$10,000 | | | | | | | | | |
| ł. | Monthly Payment | (\$195.50) | | | | | | | | | |
| ŧ. | | | | | | | | | | | |
| 1 | Tatal Loan Costs | (\$3, MHLM) | | | | | | | | | |
| L | | | _ | _ | | | | | | | |
| | Period | Principal | Interest | Total | | | | | | | |
| 9 | 1 | | | (\$199.30) | | | | | | | |
| 1 | 5 | | | (\$195.30) | | | | | | | |
| 2 | 3 | | | (\$190.30) | | | | | | | |
| u | 4 | | | 0496.330 | | | | | | | |
| н | s | | | (\$193.33) | - | | | | | | |
| 1 | 4 | | | 6193.37 | - 4 | | | | | | |
| 14 | , | | | (\$190.30) | | | | | | | |
| н | 4 | | | (\$195,33) | | | | | | | |
| 11 | 1 | | | (5193.33) | | | | | | | |
| 12 | 10 | | | (\$693.33) | | | | | | | |
| 30 | 60 | (\$192.87) | 150.861 | (\$199.80) | | | | | | | |

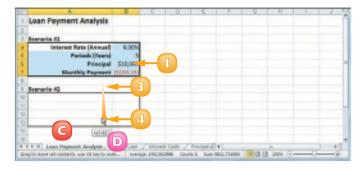
Copy a Range

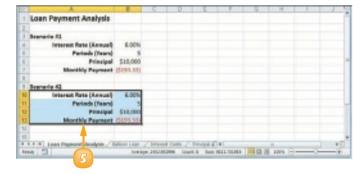
- Select the range you want to copy.
- 2 Press and hold **Ctrl**.
- Position
 over any outside border of the range.

Changes to ₿.

- Click and drag the range to the location where you want the copy to appear.
 - C Excel displays an outline of the range.
 - Excel displays the address of the new location.
- *5* Release the mouse button.
- 6 Release Ctrl.

Excel creates a copy of the range in the new location.





 \checkmark

To move or copy a range to another worksheet, click and drag the range. Remember to hold down I f you are copying the range. Press and hold I and then drag the mouse pointer over the tab of the sheet you want to use as the destination. Excel displays the worksheet. Release I and then drop the range on the worksheet.

If you can see another workbook on-screen, you can click and drag a range to it. Otherwise, select the range, click the Home tab, click Cut (IN) to move the range or Copy (IN) to copy it, switch to the other workbook, select the cell where you want the range to appear, click Home, and then click Paste (IN).

INSERT A ROW OR COLUMN

You can insert a row or column into your existing worksheet data to accommodate more information. This is particularly useful if the information you need to add fits naturally within the existing data, rather than at the end.

When you insert a row, Excel shifts the existing rows down, so you must first determine the row above where you want your new row to appear. Similarly, when you insert a column, Excel shifts the existing columns to the right, so you must first determine the column to the left of where you want your new column to appear.

Insert a Row

- Click in any cell in the row above where you want to insert the new row.
- 2 Click the **Home** tab.
- 3 Click the **Insert** .
- Click Insert Sheet Rows.
 - A Excel inserts the new row.
 - B The rows below the new row are shifted down.
 - Click the **Format** smart tag (💁).
- 6 Select a formatting option for the new row (◎ changes to ◎).

| Parial Payment Principal Interest Interest Principal Interest Interest Interest Interest Interest Interest Interest Interest Interes Interest Interest | a bal |
|--|---------|
| A Output Image: State in the state in th | a bal |
| A D C D C D C D <thd< th=""> <thd< th=""> <thd< th=""> <thd< th=""></thd<></thd<></thd<></thd<> | - |
| Loan Data 6.0% Interest Rets General 6.0% 5.0% Amerization Transit 5.0% Privilation 500,000 Privilation 0 Amerization Schedule 0 Period Privilation B CistLAE1.38 (SIL0.00.000) 1 (SILAE1.38) (SIL0.00.000) (SIL0.00.000,001) | - |
| 2 Interest Rete General 6.00% Americation (Tears) 25 Privilized 5500,000 Privilized 0 Americation Schedule Period Privilized Playment Privilized Interest Privilized Interest Privilized Playment Privilized Interest | |
| Ameritanian (marc) 25 Principal S500,000 Pryment Type 0 Ameritation Schedule Period Period Payment Principal Intervent Princintervent Princin | |
| Ameritanian (marc) 25 Principal S500,000 Pryment Type 0 Ameritation Schedule Period Period Payment Principal Intervent Princintervent Princin | |
| Principal SSR0.000 Payment Type 0 Amaritation Schedule Comulative Comulative Rem Period Payment Principal Interve 1 (SSLA81.38) (SSLA81.38) (SIG.000.00) | |
| Payment Type 0 7 Amerization Schedule Corrolative Corrolative Res 8 Period Principal Internet Princincon Internet Principal Internet Principal Internet | |
| E Pariad Payment Principal Internet Principal Inter | |
| Partial Payment Principal Interest Interest Principal Interest Principal Interest Principal Interest Principal Interest Interes Interest Interest | |
| 1 (551,481,38) (521,481,38) (530,000.00) (531,481,38) (530,080,08) \$47 | aining. |
| | neipal |
| | 518-62 |
| a find the first the first start is the start of the star | |
| | 748.35 |
| Anteriore and anterior and anterior of the second second of the | 811.87 |
| | 811.87 |
| | 811.87 |
| K + X + Americation Schedule / Darts / Dynamic Americation Schedule 4 | 811.87 |

| | COV - 14 | | Lowes - N | Accest bod | | | basia an | 0 |
|---------------|--|--|--|--|---|--|---|-----|
| 10.0 | these Deat # | hiprianal Ann | nuter Data | Anne. Ve | | | | . 1 |
| | Game - 10 ■ 2 Ⅱ - A Ⅲ - 21 - A Fort | | 12 Consul 13 4 - 5 14 - 5 1 | · · Brinnin | land Formatting * Lacitation * (Re) * | 2*Dust - 2*Costs - Efformat - Com | Z · Zr A | 1 |
| ,A3 | s + (* | 4 | | | | | | |
| | A | 0 | 0 | D | 1 | r · | G | |
| - Are | ertisation (Yea | 15 | | | | | | |
| B | Payment Type | O Format Sam | e Ac Jalon | | Cumulative Principal | Cumulative | Remaining | |
| r | Payment Type | Promot Sam C Format Sam C Shar Format | e-lo-libeve e-lo-libeve e-lo-libeve e-lo-libeve e-lo-libeve e-lo-libeve e-lo-libeve e-lo-libeve | Interest | Principal | Interest | Principal | |
| r | Payment Type | Provent fam C Format Sam C Shar Format Terretories | e Lo Libeve a Ac Dalco Ging " (persymmetric) | Endminent (\$30,000.00) | | Enterent (\$38,000.00) | Principal \$478,538.63 | |
| r | Payment Type | Promot Sam C Format Sam C Shar Format | e-lo-libeve e-lo-libeve e-lo-libeve e-lo-libeve e-lo-libeve e-lo-libeve e-lo-libeve e-lo-libeve | Interest | Principal (521,481.38) | Interest | Principal | |
| r - | Payment Type | C Format Sam C Format Sam C Shar Format SSS1,4881.381 | e. Jo. Jacove e. Act Jacove Gang (522,770,26) (524,156,48) | Intersect (530,000.00) (538,711.12) | Prinalgual (521,481,38) (544,251,65) (548,388,33) | (\$16,000.00) (\$16,000.00) (\$16,711.12) | Principal \$478,538.63 \$455,748.35 \$451,611.87 | |
| F Amorti 9 | Payment Type | Promot Sam O Format Sam O Sam Face (C) Sale Face (SS1,481.381 (SS1,481.381 | e Jo Jahove e Ao Jahove Janop Janoparational (S12,770,26) (S14,156,48) (S15,588,67) | 538,000.00) (538,711.12) (527,544,90) (525,896.72) | Prinalgual (521,481,38) (544,251,65) (548,388,33) | Testarmett (\$38,000.00) (\$58,711.52) (\$58,058.02) (\$58,058.02) (\$511,952.73) | Principal \$478,538.43 \$455,748.35 \$431,611.87 \$406,037.30 | |
| F Amorti 9 | Payment Type | 0 Forma Sam 0 Forma Sam 0 Sam Form 1951, 481, 381 1951, 481, 381 1951, 481, 381 1951, 481, 381 1951, 481, 381 1951, 481, 381 | e Jo Johne a Ac Jacon Isono (S12,770.26) (S14,136.40) (S17,138.267) (S17,138.76) (S18,746.93) | Interest (530,000,00) (538,711,12) (527,544,90) (528,896,71) (528,306,75) | Principal (521,481,380 (544,351,65) (588,388,13) (588,472,86) (5121,082,55) (5140,835,48) | Testarust (\$38,000.00) (\$58,711.52) (\$58,058.02) (\$011,952.73) (\$015,952.73) | Principal \$478,538.43 \$455,748.35 \$451,631.87 \$406,027.30 \$378,967.45 | |

Insert a Column

- Click any cell in the row to the left of where you want to insert the new column.
- 2 Click the **Home** tab.
- 📀 Click the **Insert** 🗹.
- 4 Click Insert Sheet Columns.
 - G Excel inserts the new column.
 - The columns to the right of the new column are shifted to the right.
- 5 Click the **Format** smart tag (**7**).
- Select a formatting option for the new column (◎ changes to ◎).

| 100 | | | 8- 523 1 | Constituent Process on the Carl Data | - | 3ª part | | 3 |
|------|---------|--------------------------------------|----------------|--|-----------------|------------------|-------------------|------------------|
| - | 42 | | 6 | P | | La hart | Stat | |
| 1 | Product | Product Name | Predest Cade | Qtycles | Qay-Gas Hand | Qty Arathible | Qty-Dis douber | Rearder Level |
| 2 | 11 | larthwind Tablers Chai | INVET5-1 | | | 1 | 41 | 10 |
| 3 | 3.1 | lerthulind Taslers Symp | IW/100-5 | | 50 | 50 | 50 | 25 |
| 4 | 4.1 | terthuind Traders Cajon Seasoning | IW/100-4 | | | | -40 | 1.0 |
| 8 | 5.1 | leritruind Teaders Olive Oil | INVITO-8 | | 18 | 18 | | 18 |
| 6 | 6.5 | ierthwind Traders Boysenberry Spreed | INVITIP-6 | | | | 5.0 | 25 |
| 7 | 7) | lardruind Traders Dried Peats | WWT0/%-7 | | | | | 15 |
| 8 | 0.5 | terthwind Trackers Curry Service | IVW75-8 | | | | | 1.0 |
| 8 | 34.9 | larthwind Traders Walnuts | WWT0RH-64 | | 48 | - 40 | | 18 |
| 10 | 17.8 | iarthwind Traders Fault Cacital | WW70PV-17 | | | | | 1.0 |
| 11 | 29.8 | iarthuind Tadwa Chocalate Biscults A | Vix NWTBGM-19 | | | | 28 | 5 |
| ti i | 20 1 | contrured Traders Mannalade | W01.P-6 | | | | - 40 | 1.0 |
| 13 | 21.0 | certinuind Traders Scanes. | INVITEGAT-31 | | | | | 5 |
| 14 | 34.1 | terthuind Tablers Beer | revertile-last | 28 | 28 | | | 15 |
| | | kery Ta | | DI | | | | |
| in a | e (53) | | | | | - C1 - 2 - 144 | s.(-) | |

| Ð | 글 명국 (1) | 116 | | ine | Revolution of | Boti | | | | | 0.0 | 10 |
|-------|------------------------|-----------------|------------------|--------------|--|------------|-------|-----------------|---------|------------------|--------------------|-----|
| | | Diat R | prinying Br | reulai Dela | Raise Tito | | | | | | | 81 |
| 10.00 | 4 · 4 | | H - K E | | Const 8 - 5; - 1 58 - 5; 108 - 5; | 10 Carl 21 | to be | | P Leves | Z | | |
| | 12 | * (* | 6 | | | | | | | U | | |
| | h | | 8 | | Ģ | D | | | | 0 | H | |
| 1 | Product | | Product Nan | - | Predest Car | Ce Oly | | Qty-Ges Hand | | Qry Aratistic | Ory line Border | * |
| 2 | 1 | Northwind Total | lers Chal | | INVESTIGATION OF CONTRACT OF CONTRACT. | | 25 | | | 6 | 41 | |
| 3 | 3 | Northwind Tool | lers Syman | | INVITCO-5 | | | 5 | | 07-1 50 | 50 | |
| 4 | 4 | Northwind Trad | lers Cajue Sea | geines | INV/100-4 | | | | | R. Band | lama As Lah | |
| 8 | 5 | Northuisd Tead | lers Olive Oil | | INITO-8 | | | 18 | | | value first | |
| 6 | 6 | Northwind Trad | lers Boysenbe | my Spread | INVECTIP-6 | | | | | O Che Fe | | |
| 2 | 7 | Northwind Trad | krs Dried Pea | 0 | WWT07%-7 | | | | | D Peace | - 10 million | _ |
| 8 | | Northwind Teach | kers: Curry Serv | 00 | INH75-8 | | | - 4 | | - | | |
| 8 | 34 | Northwind Trad | lers Weinuts | | HW10R9-54 | | | 48 | | | 6 | |
| 10 | 57 | Northwind Tead | lers Fault Cack | fall | NW70PV-17 | | | | | | 1 | |
| 11 | 39 | Northwind Tead | lers Chocalate | Biscults Mix | NWT56M-19 | | | | | 6 | 28 | 6 |
| 12 | 20 | Northwind Tead | leis Mannalai | de . | WETP-6 | | | | | | | |
| 11 | 21 | Northwind Tead | lers Scanes. | | INVITEGM-31 | | | | | | | |
| 14 | 34 | Marthurind Taad | lers Baar | | INVETTIMA INF. | | 28 | 23 | | | | Ε. |
| | N'N' Deep | they the | | | | 04 | | | | | | 10 |
| is a | E1 | | | | | | | | 122.4 | es (C) | | (2) |

 \checkmark

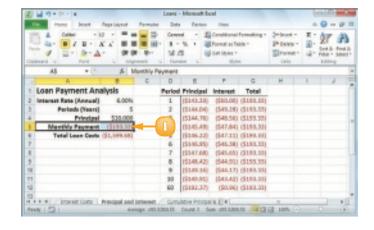
You can insert as many new rows or columns as you need. Select the same number of rows or columns as you want to insert. (See "Select a Range" earlier in this chapter to learn how to select rows and columns.) For example, if you want to insert four rows, select four existing rows. Follow Steps 2 to 4 in "Insert a Row" to insert rows or Steps 2 to 4 in "Insert a Column" to insert columns. 45

INSERT A CELL OR RANGE

If you need to add data to an existing range, you can insert a single cell or a range of cells within that range. When you insert a cell or a range, Excel shifts the existing data to accommodate the new cells.

Excel can shift the existing data down or to the right. Therefore, you need to decide in advance where you want the new range to be inserted. You then tell Excel where you want the insertion to take place by selecting existing data either below or to the right of where you want the new range to appear.

Select the cell or range where you want the inserted cell or range to appear.



2 Click the **Home** tab.



Olick Insert Cells.

Note: You can also press **Ctrl** + **Shift** + **=**.

| R a marked B | tourd 5 Post | 4 100 | | Canar Gamer S - S - Hart Hare | 4 · 5 | Conutin Conuti | - | Particles Provident R · App of Provident Data Se best foreignes Y best foreigness | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
|--------------|------------------------|---------------|-----|--|------------|--|------------|---|---------------------------------------|
| - | A5 + (* | A 10 | C C | D | | r | 6 | - Com | - |
| 1 | Loan Payment Ana | lysis | - | | Principal | Interest | Total | 4 | 17 |
| 2 | Interest Rate (Annual) | 6.00% | | 1 | 15143.330 | (\$80.00) | (\$199.30) | | |
| 3 | Periods (Nears) | 5 | | 2 | (\$144.04) | (\$49.38) | (\$199.33) | | |
| 4 | Principal | \$10,000 | | 3 | (\$144.76) | (\$49.56) | (\$193.33) | | |
| 5 | Menthly Payment | (\$195.53) | | 4 | (\$345,49) | (\$47,84) | (\$199.33) | | |
| 6 | Total Loan Cents | (\$1,599,481) | | 5 | (\$146.22) | (\$47.13) | (\$199.33) | | |
| 7 | | | | - 6 | (\$146.96) | | (\$190.30) | | |
| 8 | | | | 7 | (\$147.68) | | (\$193.33) | | |
| 9 | | | | | (\$148,42) | | (\$199.33) | | |
| 10 | | | | | (\$149.36) | | (\$199.33) | | |
| 22 | | | | | (\$149.95) | | (\$199.81) | | |
| 12 | | | | 60 | (\$191.17) | (\$0.96) | (\$199.33) | | |
| ALL A | a a 🖉 branat dara | | | | | | | | 8 |

The Insert dialog box appears.

Select the option that corresponds to how you want Excel to shift the existing cells to accommodate your new cells (
 changes to
).

Note: In most cases, if you selected a horizontal range, click the **Shift cells down** option; if you selected a vertical range, click the **Shift cells right** option.

- Olick OK.
 - Excel inserts the cell or range.
 - B The existing data is shifted down (in this case) or to the right.
- 7 Click the **Format** smart tag (𝒁).
- Select a formatting option for the new row (
 changes to
).



| 2 La March 1 a | | Loans. | Mensel b | cel . | | | 4 | -2.PS | |
|--|-----------|-----------------------------|--------------|---|------------|------------------|---|--------------------------|---|
| THE PLANE BOARD Repairwood | formulae | Out. | a Aprilan | Then | | | | | 3 |
| | | 6ana 9 - 18 - 16 - | 5 8 | Constitional Provide al Ta Cell Styles + Style | ale - | Print - Press | | Zet & And Non - Salas | |
| AS - A | | | | | | | | | |
| A 0 | 0 | D | E | F | G | H | 1 | J | 1 |
| 1 Loan Payment Analysis | | Period | Principal | Interest | Total | | | | |
| 2 Interest Rate [Annual] 6.001 | 7 | 1 | (\$143.33) | (\$80.00) | (\$199.81) | | | | |
| 3 Periods (Years) 5 | | 2 | (\$144.04) | (\$49.38) | (\$199.33) | | | | |
| Principal \$10,000 | | 3 | (\$144.76) | (\$49.56) | (\$193.33) | | | | |
| B | | 4 | (\$345.49) | (\$47,84) | (\$199.33) | | | | |
| Menthly Payment (\$190.33) | 0. | 5 | (\$146.22) | | (\$193.33) | | | | |
| 7 Total Loan Casts (\$1,599.68) | E Isana | d Same | As Jahova | - 8 | 190.301 | | | | |
| | O Fearra | d lines | As Selow | | 4193.33 | | | | |
| 2 | O Dest | low di | ing . | | (\$199.33) | | | | |
| 14 | - | | Instantiant. | | (3199.33) | | | | |
| 11 | | 20 | (\$1.09.95) | | (\$198.81) | | | | |
| 12 | | 60 | (\$192.37) | (\$0.96) | (\$199.33) | | | | |
| 13 x x x x bits rest Costs Principal and | brinnet / | 6.m | Athe Pinche | 112.4 | | | | | ń |
| Ready 3 | | | | | 100 | 1005 | | 1 | 2 |



In most cases, it is better to insert a cell or range when you have other data either to the left or right of the existing range, or above or below the range. For example, if you have data to the left or right of the existing range, inserting an entire row would create a gap in the other data. The easiest way to position the inserted cell or range is to select the cells that are where you want the new cell or range to appear. For example, if you want the new range to be A5:B5, select the existing A5:B5 range. When you insert the new range, Excel shifts the existing cells to accommodate it.

DELETE DATA FROM A RANGE

If your worksheet has a range that contains data you no longer need, you can delete that data. This helps to reduce worksheet clutter and makes your worksheet easier to read.

You can also delete a range that you no longer need. Note that when you delete a range, Excel deletes not just the data within the range, but the range cells themselves. Excel shifts the remaining worksheet data to replace the deleted range.

Delete Range Data

Select the range that contains the data you want to delete.

| 1 | Category Name | Product Name | Quartity Per Unit | | |
|-------|--------------------|-------------------------------|----------------------|------------------|-----|
| 2 | Deverages. | Chail . | 10 boxes x 20 bags | | |
| 3 | deverages. | chang | 24 - 12 or bottles | | |
| 4 | (leverages | Chartreuse verte | 750 cc per lectule | | |
| 5 | Beverages. | Côta de Blaye | 12 - 79 si botilies | | |
| ۶. | tieverspes | speh coffee | 15-500 grine | | |
| 7 | Geverages | Lakkalikööri | 500 ml | | |
| 8 | Revenages. | Laughing Sumbergash Lager | 24 - 12 na bettles | | |
| 9 | timverages. | Outback Lager | 24 - 355 mi betties | | |
| 19 | Geverages | Rhönbräu Klesterbier | 24-0.51 bottles | | |
| 13 | Reveniges | Sespatch ale | 24 - 12 or bettles. | | |
| 12 | deverages | Steeleye Stout | 24 - 12 os bottles | | |
| 13 | Condiments | Anioeed Synup | 12 - 558 ml bettles | | |
| 14 | Condiments | Chief Anton's Capun Seasoning | 48-6 10 (44) | | |
| 15 | Candiments | denen thougo | 24 - 258 vsl battles | | |
| 15 | Candiments | Grandma's Boysenberry Spread | 12 - 6 oz jani | | |
| | A R sheets / She | HD / WHHD / BJ / | EN | | |
| firs. | + 53 | | Count 23 | - CE 20 100% (-) | 0-0 |

- 2 Click the **Home** tab.
- 3 Click **Clear** (2).
- Click Clear Contents.
 - A If you want to delete the range data and its formatting, click **Clear All** instead.

Excel removes the range data.

| The second | | · A' A' ■ ■ ■ ∰ Annen · A' A' ■ ■ ■ ∰ · S · · Δ · Ø Ø Ø ↔ · 12 .0 | No I Strong at table - | Press - | A |
|------------|---------------|---|------------------------|---------|---------------|
| | A2 - | C & Beverages | 4 | | na foresti |
| 1 | Category Name | Product Name | Quantity Per Unit | 0 | ing Cognards |
| 3 | Benerapes | Chai | 10 benesis 20 bags | | an Hyperprise |
| 3 | menerages . | chang | 24 - 12 or hornes | 1.1 | |
| 4 | Benetaget | Chartreuse verse | 750 cc per bottle | | |
| 5 | Berrerapez | Citte de Bleye | 12 - 75 d bottles | | |
| 8 | Beverapes | Ipoh Carlies | 18-500g tins | | |
| т | Benesiges | Lakkalikoovi | 500 val | | |
| 8 | Beverages | Laughing Lumberjack Lager | 24 - 12 or bottles | | |
| 9 | Benerapes | Outback Lager | 24 - 105 mil bottles | | |
| 30 | Benerapes | Rhönbrik Klosterbier | 24-0.51 bottles | | |
| 11 | Benesages | Satisputch Ale | 24 - 12 or hottles | | |
| 12 | Beverages | Steelege Staut | 24 - 12 or bottles | | |
| 13 | Condiments | Anised Syrup | 12 - 550 mil bottlee | | |
| 14 | Condiments | Chef Anton's Cajun Seasoning | 40-6 cc jars | | |
| 25 | Condimients | Gener Shouyy | 24 - 250-mi bottles | | |
| | | Grandma's Boysenberry Spread | 12 - 8 on jars | | |

4 8

Undo Range Data Deletion

Click the **Undo** 🔄.

Click Clear.

Note: If the data deletion was the most recent action you performed, you can undo it by pressing **Gttl** + **Z** or by clicking **Undo** (**D**).

Excel restores the data to the range.

| ž. | H - 0 - 14 | Preducts By Cale | spory - Microsoft Eveni | | OCTO N | ĺ |
|------------|-------------------|--|--|---|-------------|---|
| | - Oes | Aspallayout Normales data | Rankon then | | | i |
| The second | the second second | · 12 · · · · · · · · · · · · · · · · · · | 16 1 Strange at Table 1 Cell Styles 1 | Prinast * Prinast * Different * Cals | E · Ar Anta | |
| | A2 ~ | (* A) | | | | ŝ |
| | A | | C | D E | F S | 1 |
| 1 | Category Name | Product Name | Quantity Per Unit | | | |
| 2 | Berrenapez | Chai | 18 berkes + 20 hep | | | |
| 3 | Beverages | Chang | 24 - 12 or bothes | | | |
| 4 | Benesiges | Charlaesse serie | 790-ocper bottle | | | |
| 5 | Beverages | Citte de Maye | 12 - 75 d bottles | | | |
| 6 | Bewerages | lpoh Caffee | 18-580 g 1m | | | |
| 7 | Beverages | Lakkalikööri | 500 ml | | | |
| 8 | Benesages | Laughing Lumberjack Lager | 24 - 12 or bottles | | | |
| | Beverages | Outback Lager | 24 - 355 rel bottles | | | |
| 90 | meuerspec | Rhonbris, klosterbier | 24-0.5-I bottles | | | |
| 11 | Deverapes | Seequatch Ale | 24 - 12 or bottles | | | |
| 12 | Benerapes | Steelese Stavt | 24 - 12 or bottles | | | |
| 53 | Condiments | Aniesed tyrup | 12 - 550 mi bottlee | | | |
| 14 | Condiments | Chef Anton's-Cejun Seeponing | 40-5 cc jars | | | |
| 15 | Condiments | Gener Showys | 24 - 250-millionthes | | | |
| | Condiments | Grandma's Baysenberry Spread | 12-3 capes | | | i |
| | s a sheets Ste | d steel to | E+ | | | |
| 1944 | W [22] | | (11) | 105 (a) | 0 (8) | |

Delete a Range

- Select the range that you want to delete.
- 2 Click the **Home** tab.
- 🕄 Click the **Delete** 🗹.
- Click Delete Cells.

The Delete dialog box appears.

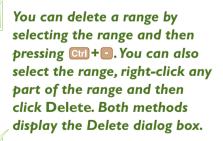
Note: In most cases, if you have data below the selected range, click **Shift cells up**; if you have data to the right of the selected range, click **Shift cells left**.

🗿 Click **OK**.

Excel deletes the range and shifts the remaining data.

You can delete data from a range by selecting the range and then pressing Del.

| 102 | | 2 apod formula Outs • A ⁺ A ⁺ ■ ■ ■ 00 Gamesa • A ⁺ A ⁺ ■ ■ ■ 00 Gamesa • A ⁺ A ⁺ ■ ■ 00 H ⁺ S · · | t Stones 4 | | | |
|-----|---|--|----------------------|----|-----------------------|----|
| _ | A2 * | C & Beverages | | 18 | Owlette Unced Columns | |
| | A | | C | D | Owlette Should | |
| 1 | Category Name | Product Name | Quantity Per Unit | | | |
| 2 | Benerapes | Chai | 18 beneti a 20 hags | | | |
| 3 | neverages . | chang | 24 - 12 00 BOTSHS | | | |
| 4 | aninezagnet | Chartreuse verse | 750 cc per bottle | | | |
| 5 | berreneges | Citte de Bleye | 12 - 75 cl bettles | | | |
| 8 | Beverages | Apoh Carlleo | LK - 500 g 8 ms | | | |
| 3 | Benesiges | Lankaltikoleri | Milleri | | | |
| | Beverages | Laughing Lumberjack Lager | 24 - 12 oc bottles | | | |
| 9 | Benetaget | Outback Lager | 24 - 355 mi bottles | | | |
| 90 | leverapes | Rhönbris Klosterbier | 24-0.51 hottles | | | |
| 21 | Benesages | Ratiquation Alter | 24 - 12 oc bottles | | | |
| 52 | Beverages | Steelege Staut | 24 - 12 or bottles | | | |
| 53 | Condiments | Aniseed Syrup | 12 - 550 mi bottlee | | | |
| 14 | Condiments | Chef Anton's-Cajun Seasoning | 48-6 cc jars | | | |
| 15 | Condinients | Gener Showy | 24 - 250 millionthes | | | |
| | and the second se | and a second sec | AND IN COLUMN | | | |
| | b # Sheet1 / Ste | Grandma's Boysenilienty Spread | 12-3 or jars | | | 10 |



To delete a row or column, select any cell in it, click the Home tab, click the Delete ⊡, and then click Delete Sheet Rows or Delete Sheet Columns.

HIDE A ROW OR COLUMN

If you do not need to see or work with a row or column, temporarily, you can make your worksheet easier to read and to navigate by hiding the row or column.

Hiding a row or column is also useful if you are showing someone a worksheet that contains private or sensitive data that you do not want the person to see. For example, if a row or column contains salary data, passwords, or Social Security numbers, you should hide the row or column to protect this data from non-authorised viewers.

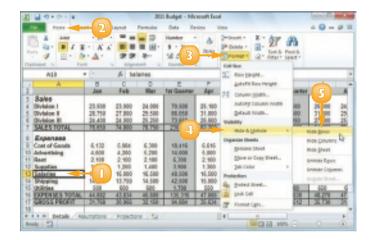
Hide a Row

- Click in any cell in the row you want to hide.
- 2) Click the **Home** tab.
- Click Format.
- Click Hide & Unhide.
- Click **Hide Rows**.

Note: You can also hide a row by pressing **Ctrl** + **9**.

Excel removes the row from the worksheet display.

A Excel displays a slightly thicker heading border between the surrounding rows to indicate that a hidden row lies between them.



| | A | | C. | 0 | - E | 1 | 6 | | 1 | 1 | |
|------|--------------------|-----------|----------|--------|-------------|--------|--------|-----------|-------------|--------|------|
| 3 | | Jan | Feb | Mar | Tel Quarter | Apr | Hey | Jan | 2nd Quantor | Jul | - 2 |
| 1 | Sales | | | | 10000 | | | | | | |
| 4 | Olivision 1 | 23,600 | 23,000 | 31,008 | 70.400 | 25,100 | 25.800 | 25,480 | 75,600 | 26,000 | 34 |
| 5 | Olymon B | 26,760 | 27,900 | 29,908 | 86.190 | 31.008 | 30.900 | 36.000 | 96,900 | 31,080 | 29. |
| 6 | Olivision III | 31,400 | 24,300 | 25,258 | 73.960 | 25,600 | 27,800 | 28,750 | 80,360 | 27,080 | 25 |
| Ŧ | SALES TOTAL | 76,810 | 75,290 | 78,758 | 230,600 | 42,758 | 62,900 | 42,150 | 247,598 | 84,000 | 71 |
| | Expenses | | | | | | | | | | |
| ŝ | Cost of Guoda | 6.132 | 6.016 | 6.300 | 10.440 | 6.616 | 6.800 | 6.572 | 19,300 | 6.720 | 4. |
| 15 | Advertising | 4.600 | 4.299 | 5.208 | 14,000 | 5.008 | 5.500 | 5.250 | 15,750 | 5.580 | 5. |
| 17 | | 2,100 | 2.180 | 2,100 | 6.300 | 2,108 | 2,100 | 2,180 | 6.300 | 2.100 | 2 |
| 1 | A | 1,300 | 1,290 | 1,408 | 3,900 | 1,308 | 1,210 | 1.480 | 3,960 | 1,200 | 1 |
| 24 | - sping | 14,200 | 13,750 | 14,000 | 42.500 | 15,008 | 14,500 | 14,750 | 44,250 | 15,000 | 14 |
| 15 | Utilides | 900 | -580 | 600 | 1,700 | 658 | 800 | 650 | 1,800 | 650 | - 1 |
| 25 | EXPENSES TOTAL | 44,862 | -63.056 | 45,600 | 135,348 | 47,086 | 47,810 | 47,722 | 141,008 | 48.276 | -42 |
| 17 | GROSS PROFIT | 21,768 | 21,204 | 32,158 | 91.212 | 38.634 | 25.450 | 24.428 | 105.512 | 26.730 | - 21 |
| ł | | | | | | | | | | | |
| 2 | | | | | | | | | | | |
| | i a al getalk / Al | L'Instant | / Pigeda | 01.721 | | 1 | 4 | _ | _ | | + |
| Rei. | 4 53 | | | | | | | S [2] [2] | 1885 0 | | -0 |

Hide a Column

- Click in any cell in the column you want to hide.
- Olick the Home tab.
- Click Format.
- 4 Click Hide & Unhide.
- Click **Hide Columns**.

Note: You can also hide a column by pressing **Ctrl** + **0**.

Excel removes the column from the worksheet display.

Excel displays a slightly thicker heading border between the surrounding columns to indicate that a hidden column lies between them.

| 201 | 10-0-2 Iven | ory - Microsoft Exce | | and the A |
|----------|--|------------------------|----------------------|---------------------------|
| | none -2 and Parmiles D | ris Interv | Vew | |
| IL M | AT BERT AT AT BERNITS | 3 | Prineet - Z - Z - A | 4 2 |
| _ | C1 • (* ,6 Product Code | | 10 Revigeget. | 6 6 |
| 1 | A B Product Presdant Kan | Product | 25 Column girds. | Qry-0a Rea te Order Le |
| 2 3 | 1 Northwind Traders Chai 3 Northwind Traders Synap | NWTE-1 NWTCD-3 | Equal trans- | 0 4L 50 50 |
| 4 | 4 Northwind Tealers Cajon Seasoning | NWTCO-4 | Vallety Nor Sciprode | A AN AN |
| 5 | 5 Northwind Traders Olive Oli 6 Northwind Traders Boyoerberry Spread | NWT0-5 NWTJP-6 | Organize litre it. | Here Devens |
| 7.8 | 7 Northwind Traders Onled Pears 8 Northwind Traders Curs Sevce | AWTDRN-7 AWTS-8 | More to Casy Dired | Pode (print |
| 9 | 14 Northwind Tsalers Walnuts | NUTDEN-14 | 4 | Lindo Commo |
| 10 11 | 17 Northwind Traders Fruit Cacitali 19 Northwind Traders Chocolate Biscuitz Mix | AWTOPALT AWTEGNI-19 | Sa Duted Deet. | , <u>5</u> |
| 12 | 20 Northwind Traders Mormolodia 21 Northwind Traders Scenes | NINTERM-21 | g parcer | 0 40 |
| | a mentary / | | DHL AN AN | 1 1 |
| hea | 4 [2] | | CI 63 10% (| 0 0 |

| | A | Ð | | 1 | | 0 | 11 10 | 1 |
|----|---------------|--|----------------|----------------|------------------|-----------------|------------------|-------|
| 1 | Product ID | Product Name | Qty On Hold | Qty On Hand | Qty Available | Qty-Dm Order | Rearder Level | |
| 2 | 1 | Northwind Traders Chai | 25 | 25 | 0 | 45 | 50 | |
| 3 | 3 | Northwind Trades Syrup | 0 | 50 | 50 | 50 | 25 | |
| 4 | 4 | Northwind Traders Cajun Seasoning | 0 | 0 | 0 | 40 | 10 | |
| 6 | 5 | Northwind Traders Olive Oil | 0 | - 25 | 25 | | 50 | |
| 6 | 6 | Northwind Traders Boysenberry Spread | D. | 0 | 0 | 30 | 25 | |
| 7 | 7 | Northwind Traders Dried Peers | 0 | 0 | 0 | | 50 | |
| 8 | 8 | Northwind Traders Curry Seace | 0 | 0 | 0 | | 30 | |
| 6 | 54 | Northwind Traders Walnuts | Ø | 40 | -40 | 0 | 50 | |
| 10 | 17 | Northwind Trades Fruit Coshtatil | 0 | 0 | 0 | | 30 | |
| 11 | 19 | Northwind Traders Chocolate Biscuits Mix | 0 | 0 | 0 | 20 | 5 | |
| 12 | 20 | Northwind Traders Marmalade | 0 | 0 | 0 | 40 | 50 | |
| 13 | 21 | Northwind Traders Scones | 0 | 0 | 0 | | 5 | |
| | 1 H 1 | entres Contraction | ** | 1141 | + | | | 10 |
| he | | | | | 1 100 123 | 1000 | | - 141 |

 \checkmark

Another way to hide a column is to move \bigcirc over the right edge of the column heading (\bigcirc changes to +) and then click and drag the edge left until the width displays 0.



To display a hidden row or column, select the rows or columns on either side of the hidden row, click Home, click Format, click Hide & Unhide and then click Unhide Rows or Unhide Columns.

FREEZE ROWS OR COLUMNS

As you vertically scroll a worksheet, you can keep your column labels in view by freezing the row or rows that contain the labels. This makes it easier to review and edit the existing data and to insert new data to the worksheet because you can always see the column labels.

If your worksheet also includes row labels, you can keep those labels in view as you horizontally scroll the worksheet by freezing the column or columns that contain the labels.

Freeze Rows

- Scroll the worksheet so that the row or rows that you want to freeze are visible.

C changes to ≠.

Click and drag ÷ and drop it below the row you want to freeze.

Excel splits the worksheet into two horizontal panes.

- Click the View tab.
- Click Freeze Panes.
 - Click Freeze Panes.
 - If you want to freeze just the first row, you can bypass Steps
 I to 3 and click the Freeze
 Top Row command.

Excel freezes the panes.

| ł | A | 5 | 0 | 5 | | 6 | н | 1 | i |
|-----|----------|-----------------------------------|----------------|----------------|------------------|-----------------|------|---|---|
| 1 | Product | Product Name | Qty On Hold | Qry Gu Hand | Quy Available | Qty-De Order | 2 | | |
| 2 | 1 North | vind Traders Chail | 2 | 25 | 0 | 40 | - 45 | - | 1 |
| 2 | 3 North | vind Traders Syrup | 0 | 50 | 50 | 50 | 25 | | |
| 2 | 4 North | wind Traders Colum Seasoning | 0 | 0 | 0 | 40 | 50 | | |
| 5 | 5 North | vind Traders Olive OII | 0 | 25 | 25 | | 50 | | |
| 6 | 6 North | uind Tradere Boysenberry Spread | 0 | 0 | 0 | 10 | 25 | | |
| Τ | 7 North | uind Traders Dried Peers | 0 | 0 | 0 | | 50 | | |
| ε. | 8 North | vind Traders Curry Sauce | D | 0 | 0 | | 10 | | |
| | 14 North | wind Traders Walnuts | D | 40 | 40 | | 50 | | |
| tō. | 17 North | vind Traders Fruit Cocktail | 0 | 0 | 0 | | 50 | | |
| 1 | 19 North | vind Traders Chocolate Biscults N | Vix D | 0 | 0 | 20 | 5 | | |
| 12 | 20 North | vind Trades Marmalade | 0 | 0 | 0 | 40 | 50 | | |
| 5 | 21 North | wind Traders Scones | 0 | 0 | 0 | 0 | 5 | | |

| 201 | G 17 × 0 | N - 14 | browthe | y - Manualt B | acel. | - | | (m)d | - |
|------|---------------|--|-------------------------|---------------|--|---|----------------|---|-------|
| | | ne boat Pa | relayed Permulae Dat | a finites | Nes - | -4 | | - 0 | - 0 : |
| - | | Page Break Presies Dantom Visuas Full Screen | 4 1 4 1 | | Parateses Inge 3.8 De Paratese * | | Sarr Sa | 10 A | |
| - | 11.7 | . (~ | 6 | | 1840 104 | a seld-columns a | | the heit of | - 6 |
| | | | 8 | | Farmer To | | D | | - |
| 1 | Product 1D | Pro | oduct Name | | the seal of | top rownsible Plife workshop of Column | while sarption | g through | |
| 1 | Product 2D | Pro | idari Name | Qty Hota | Bringht | that sources via the real of the o Available of | | Level | |
| 2 | 1 | Northwind Trade | s Chel | 25 | 25 | 0 | 41 | 10 | |
| 3 | 3 | Northwind Trade | is Barap | 0 | 50 | 50 | 50 | 25 | |
| 4 | 4 | Northwind Trade | s Calum Beasoning | 0 | ġ. | 0 | 40 | 30 | |
| 5 | 5 | Northwind Trade | s Olive Oil | D | 25 | 15 | | 50 | |
| 6 | 6 | Northwind Trade | s Boysenbeery Spread | 0 | 0 | 0 | 30 | 25 | |
| Τ | 7 | Northwind Trade | to Dried Peets | 0 | 0 | 0 | 0 | 10 | |
| 8 | 8 | Northwind Trade | s Curry Seuce | 0 | 0 | 0 | 4 | 10 | |
| ٠ | 34 | Northwind Trade | s Walnuts | 0 | 40 | 40 | 0 | 50 | |
| 10 | 17 | Northwind Trade | s Fruit Cocktail | 0 | 0 | 0 | 0 | 50 | |
| 11 | 19 | Northwind Trade | s Chocalate Nacults Mix | 0 | 0 | 0 | 20 | 5 | |
| | | wotory / tu | | | Bal | | | | - 1 |
| Res. | 4 51 | | | | | 1000 | 100% (C | | - (0) |

Freeze Columns

- Scroll the worksheet so that the column or columns that you want to freeze are visible.
- Position ver the vertical split bar (1).

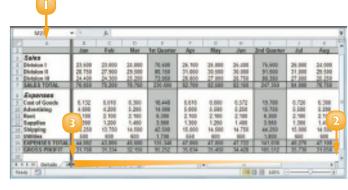
Changes to +.

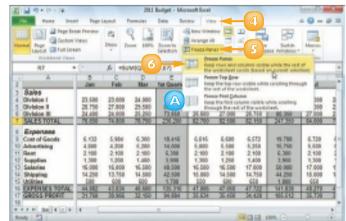
3 Click and drag ↔ and drop it on the right edge of the column you want to freeze.

Excel splits the worksheet into two vertical panes.

- Click the View tab.
- Click Freeze Panes.
- Olick Freeze Panes.
 - If you want to freeze just the first column, you can bypass Steps I to 3 and click the Freeze First Column command.

Excel freezes the panes.





You can unfreeze a row or column by clicking View, Freeze Panes, and then Unfreeze Panes. If you no longer want your worksheet split into two panes, click View and then click Split (国).

To adjust the position of a frozen row or column, you must first unfreeze them. You can then click and drag the split bar to the new location.

MERGE TWO OR MORE CELLS

You can create a single large cell by merging two or more cells. For example, it is common to merge some of the top row of cells to use as a worksheet title. Another common reason for merging cells is to create a label that applies to multiple columns of data. This can make your worksheet easier to read because it makes it clear that the label applies to multiple columns instead of just a single column.

 Select the cells that you want to merge.

- 2 Click the **Home** tab.
- 3 Click the Merge and Center .
- Olick Merge Cells.

| | A | | 4 | 0 | 1 | T. | - 6 | H | | | 1 | 4 | M | M |
|-----|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| | | - | | | | | | | | | | | | |
| 3 | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | New | Dec | TOTAL |
| 3 | Division I | \$29,900 | \$13,800 | \$24,000 | \$25,300 | \$25,000 | \$25,400 | \$28,000 | \$34,000 | 524,000 | \$28,000 | \$34,000 | \$24,000 | \$294,000 |
| 4 | Division 8 | \$28,750 | \$27,900 | \$29,500 | \$31,000 | \$30,580 | \$38,008 | \$31,800 | \$29.580 | \$29,500 | \$82,800 | \$29,580 | \$29,500 | \$858,650 |
| 5 | Division III | \$24,400 | \$34,300 | \$25,250 | \$25,800 | \$27,000 | \$24,750 | \$27,800 | \$25,250 | \$25,250 | \$28,800 | \$25,250 | \$25,250 | \$313,300 |
| Б. | SALES TOTAL | \$25,050 | \$75,200 | \$28,258 | \$82,300 | \$82,580 | \$83,858 | \$84,000 | \$38,250 | \$28,758 | \$88,000 | \$38,750 | \$28,258 | 9962,953 |
| 1 | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | |
| p. | | | | | | | | | | | | | | |
| Ē | | | | | | | | | | | | | | |
| | a a Mineri | 1/3-11 | 2./The | 0.25 | | | | | E4 | | | | | |
| Ret | 4 23 | | | | | | | | | _ | 12 28 1 | 20% (C)- | | |





Excel merges the selected cells into a single cell.

| | A | - B- | 6 | 0 | 1 | T. | - 6 | ы | 1 | | в. | 4 | M | M | 1 |
|----|--------------|----------|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----|
| 1 | | | | | | | | | | | | | | | |
| 3 | Sales | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | New | Dec | TOTAL | |
| 3 | Division I | \$29,909 | \$18,800 | \$34,000 | \$25,300 | \$23,800 | \$25,400 | \$28,000 | \$34,000 | 524,000 | \$29,000 | \$34,000 | \$24,000 | \$294,000 | ð |
| 4 | Division 8 | \$28,750 | \$27.900 | \$29.500 | \$31,000 | \$30,580 | \$38,000 | \$81,800 | \$29.580 | \$29,500 | \$82,800 | \$29.586 | \$29,500 | \$858,650 | ł. |
| 5 | Division III | \$24,400 | \$34,300 | \$25,250 | \$26,600 | \$27,000 | \$26,750 | \$27,800 | \$25,250 | \$25,250 | \$28,800 | \$25,250 | \$25,250 | \$223,300 | |
| 6 | SALES TOTAL | \$25,050 | \$75,200 | 578,758 | \$82,300 | \$82,580 | \$83,858 | \$84,000 | \$38,250 | \$28,258 | \$88,800 | \$38,250 | \$28,758 | 9962,953 | i. |
| 1 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| | 4 5 | 1.28-00 | 2 - 2 Here | 0.25 | | | | | 84 | _ | | | | | |

Type your text in the merged cell.

| | A | | - C | - 13 | - E | - | - 6 | BL. | 1 | - 1 | 16 | 4 | M | N 4 |
|-----|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| 1 | | 348.0 | warter | Sales - | | 5 | | | | | | | | |
| 2 | Sales | Jan | Feb | Mar | Apr | and f | Jun | Jul | Aug | Sep | Oct | New | Dec | TOTAL |
| 3 | Division I | \$29,909 | \$13,800 | 534,000 | \$25,300 | \$25,800 | \$25,400 | \$28,000 | 534,000 | 524,008 | \$29,800 | 534,000 | \$24,000 | \$294,000 |
| 4 | Division 8 | \$28,750 | \$17,900 | \$29.500 | \$31,000 | \$30,580 | \$38,008 | \$81,800 | \$29,580 | \$29,500 | \$82,800 | \$29,580 | \$29,500 | \$858,650 |
| 5 | Division III | \$24,400 | \$34,300 | \$25,250 | \$26,600 | \$27,000 | \$24,750 | \$27,800 | \$25,250 | \$25,250 | \$28,600 | \$25,250 | \$25,250 | \$313,300 |
| ٤. | SALES TOTAL | \$25,050 | \$75,200 | \$78,758 | \$82,300 | \$82,580 | \$82,858 | \$84,000 | \$38,250 | \$28,258 | \$88,800 | \$38,250 | \$28,258 | 9962,953 |
| 3 | | | | | | | | | | | | | | |
| ł. | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | |
| 33. | _ | _ | _ | | _ | | | | | | | | | _ |
| n | a a start | 1.2350 | 2.284 | 0.25 | | | | | E 4 | | - | _ | | |

You can centre a title across the entire worksheet or a heading across the columns that it refers to. Follow Steps I to 3 and then click Merge & Center. Excel creates the merged cell and formats the cell with the Center alignment option. Any text you enter into the merged cell appears centred within the cell.

TRANSPOSE ROWS AND COLUMNS

You can use Excel's Transpose command to easily turn a row of data into a column of data, or a column of data into a row of data. You can also transpose rows and columns together in a single command, which is handy when you need to restructure a worksheet.

 Select the range that includes the data you want to transpose.

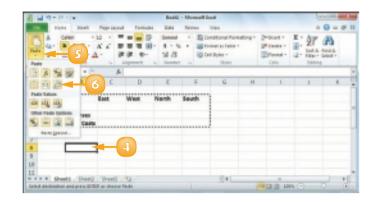
- 2 Click the **Home** tab.
- 3 Click **Copy** (🗎).

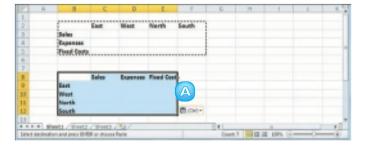


| | 2 | | 2 | e Ferrie | | - Maray | Excel rine | | 4 | 0 |
|-------------|----|----------------------------------|------|------------|------------------------------|---------|---|--|-------------------------------------|----|
| | - | -3 | | | Cananal 5 - 10 10 - 20 | . 10 | Constitional Permetting Permet as Table - Cell Styles - 2005 | - Seland - Seland - Sformat - Citta | Z · ZI 2. Sort E 2. Fourthere | |
| | 83 | • (* | , A | | | | | | | |
| | | 8 | c | p. | | 1 | - 6 | H I | 4 | R. |
| 1 2 3 4 5 6 | | Solar Expenses Fixed Costs | East | West | Morth | leath | | | | |
| 7 9 9 | | | | | | | | | | |
| | 1 | en./19441 | and. | u / | | | [] 4 [| | | 1 |

- Click where you want the transposed range to appear.
- 🕝 Click the Paste 🗹.
- 🙆 Click **Transpose** (🔤).

Excel transposes the data and then pastes it into the worksheet.





If you want to transpose a single horizontal or vertical range of cells, then select just that range. If you want to transpose a horizontal range of cells and a vertical range of cells at the same time, select the range that includes all the cells, as shown in this section's example. Excel's Transpose command works with text, numbers, dates, formulas, and any other data that you can add to a cell. So if you have a rectangular region of data that includes row labels, column labels, and cell values within each row and column, you can select the entire range and transpose it.

DEFINE OR CHANGE A RANGE NAME

A range name is a text label that you apply to a single cell or to a range of cells. Once you have defined a name for a range, you can use that name in place of the range coordinates, which has several benefits. For example, range names are more intuitive, particularly in formulas; range names are more accurate than range coordinates; range names are easier to remember than range coordinates; and range names make it easier to navigate a worksheet. This chapter explains range names and shows you how to define, edit, and use range names.

Before you can use a range name in your formulas or to navigate a worksheet, you must first define the range name. You can define as many names as you need and you can even define multiple names for the same range. In this section, you learn to create range names by hand.

Define a Range Name

Select the range you want to name.

- 2) Click the **Formulas** tab.
 - Click **Define Name**.

The New Name dialog box appears.

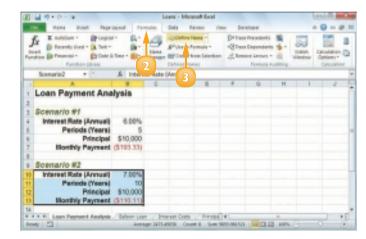
Type the name you want to use into the **Name** text box.

Note: The first character of the name must be a letter or an underscore (_). The name cannot include spaces or cell references, and it cannot be any longer than 255 characters.



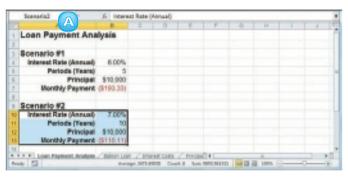
Excel assigns the name to the range.

| cenario #1 | lysis | | | | | | | | |
|--|---|--|--|---|--|---|---|--|---|
| | | | | | | | | | |
| | | | | | | | | | |
| and the second sec | | | | | | | | | |
| Interest Rate (Annual) | 6.00% | | | | | | | | |
| Periods (Years) | 5 | | | | | | | | |
| Principal | \$10,000 | | | | | | | | |
| Monthly Payment | (\$193.33) | | | | | | | | |
| | | | | | | | | | |
| cenario #2 | | | | | | | | | |
| interest Rate (Annual) | 7.00% | | | | | | | | |
| Periods (Years) | 50 | | | | | | | | |
| Principal | \$10,000 | | | | | | | | |
| Monthly Payment | (\$116.11) | | | | | | | | |
| | - | | | | | | | | |
| | | | | | | - | | | |
| | Principal Monthly Payment Internet Rate (Annual) Perioda (Years) Principal Monthly Payment | Principal \$10,000 Monthly Payment (\$190.33) Interest Rate (Annual) 71,00% Partoda (Kaana) 71,00% Partoda (Kaana) 510,000 Monthly Payment (\$116,11) | Principal \$10,000 Monthly Payment (\$100.33) enertio #2 interest Rate (Annual) 700% Periode (Farms) 50 Principal \$10,000 Monthly Payment (\$116.11) Lows Prement Analase, Tehre Low, 216 | Principal \$10,000 Monthly Payment (\$193.33) Percent Rate (Annual) 7,00% Perceda (Faana) 50 Principal \$10,000 Monthly Payment (\$116.11) *1 Joan Prement Anders / Selar Lar. / Selar Selar *1 Joan Prement Anders / Selar Lar. / Selar Selar | Principal \$10,000 Monthly Payment (\$193.33) penerio #2 Perioda (Yaana) 7,005 Perioda (Yaana) 50 Principal \$10,000 Monthly Payment (\$116.11) Places Payment (\$116.11) | Principal \$10,000 Monthly Payment (\$193.33) penetics (Annual) 7.005 Periods (Years) 50 Principal \$10,000 Monthly Payment (\$116.11) *Loos Payment (\$116.11) | Principal \$10,000 Monthly Payment (\$190.33) percent Rate (Annual) 7.00% Periods (Nanual) 7.00% Periods (Nanual) 7.00% Principal \$10,000 Monthly Payment (\$116.11) PLose Present Anders / Inter Lose / Interest Sata / Interest 4 | Principal \$10,000 Ulenthly Payment (\$110.33) Principal 72006 Principal 510,000 Ulenthly Payment (\$116.11) | Principal \$10,000 Northly Payment (\$190,53) Principal \$10,000 Principal \$10,000 Northly Payment (\$191,000 Northly Payment (\$116,11) |



| New Name | 8 | 04 |
|------------|---------------------------------------|----|
| Berner | Scenario d | |
| Scape: | Nerkbask 💌 | |
| conneus | | * |
| | | |
| Befers to: | al per Reyment Analysis' 844:01 #0413 | 18 |
| | 5 - CMO | A. |

A The new name appears in the Name box whenever the range is selected.



Change a Range Name

- Open the workbook that contains the range name you want to change.
- 2 Click the **Formulas** tab.
- 3) Click **Name Manager**.

The Name Manager dialog box appears.

4 Click the name you want to change.

Olick Edit.

The Edit Name dialog box appears.

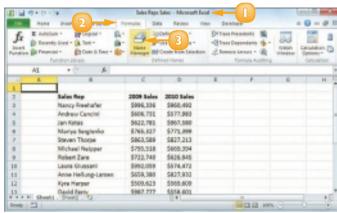
- Ose the Name text box to edit the name.
- 기 Click **OK**.

The new name appears in the Name Manager dialog box.



Click **Close**.

You can use a keyboard shortcut to open the Name Manager dialog box. Open the workbook that contains the range name you want to change and then press Cm+E3.





You can modify a range name to refer to a new range. Open the Edit Name dialog box. Click inside the Refers to reference box and then click and drag the mouse 🗘 on the worksheet to select the new range. Click OK.

USE WORKSHEET TEXT TO DEFINE A RANGE NAME

If you have several ranges to name, you can speed up the process by getting Excel to create the names for you automatically based on the range's text labels.

For example, if you have a column of sales data that has the label "Sales" on top, Excel can automatically apply the name "Sales" to that range. You can create range names from worksheet text when the labels are in the top or bottom row of the range or the left or right column of the range.

- Select the range or ranges you want to name.
 - A Be sure to include the text labels you want to use for the range names.

| 1 | | e | | |
|-----|---------------------|------------|-----------|--|
| 2 | Soles Rep | 2009 Sales | 2010 Sel | |
| 3 | Maney Freehafer | 5996,836 | \$960,482 | |
| 4 | Andrew Cencini | \$606,731 | \$577,983 | |
| 5 | Jan Sotas | 5622.781 | 5967.580 | |
| | Mariya Sergierika | \$165,827 | \$771,899 | |
| 2 | Staves Thorpe | \$843,589 | \$627,313 | |
| | Michael Neipper | \$795.518 | \$649.394 | |
| 9 | Robert Zare | \$722,380 | \$626,945 | |
| 10 | Laura Giussani | \$992,059 | \$574,472 | |
| 1.5 | Anne Hellung-Lersen | 5659,380 | 5827,902 | |
| 12 | Ryta Hatper | \$909.623 | 5349.609 | |
| 13 | David Ferry | \$887,377 | \$558.601 | |
| 14 | Paul Voyatzia | \$685,091 | \$682,982 | |
| 15 | Andrea Aster | \$840,484 | 5683.782 | |
| 18 | Charles Granek | \$650,793 | 9828,094 | |
| 17 | Karen Alleton | \$509,863 | \$511,569 | |
| 18 | Karen Hammond | 5503,699 | 5975,455 | |
| 19 | Nince Durkin | \$680,368 | \$599,514 | |
| 28 | Paul Richardson | \$779,722 | \$596,353 | |
| 22 | Gragg O'Donoghua | 5252,802 | 5652.371 | |
| 32 | 0.02/ | | 4 | |

- Click the **Formulas** tab.
- Click Create from Selection.

| | 19-01- | 14. | Sales Raps 1 | ide - Moreaft B | e le | | | 0.0 | 2 |
|----|------------|--------------------|--------------|---|--|-------------------------------------|-----------------|---|-----|
| 10 | 10.04 | Deart Page Layout | firmula: | - 2 | ter Derti | - | | | 1 2 |
| fr | in gin men | the Line - 🔒 Int - | There are | Carlona rozona + Sha uh Romosta + Create from Catacitico Inot Youmas | -Q'tear | andersta di Banda di Banda di | · Add Wester | Debucktion Debucktion Catological | ~ |
| | 82 | - A 5 | les Rep | | | | | | |
| 1 | | | e | 0 | 6 | | 6 | | 1 |
| 2 | | Sales Rep | 2009 Selea | 2000 Seleo | | | | | |
| 3 | | Nancy Exercision | \$994,334 | \$960,492 | | | | | |
| 4 | | Andrew Cencimi | \$606,731 | \$577,983 | | | | | |
| 5 | | Jan Kotas | \$612,786 | \$967,580 | | | | | |
| 6 | | Marius Sergiania | \$765, 527 | \$771,899 | | | | | |
| 7 | | Steves Thorpe | \$863,589 | \$827,218 | | | | | |
| | | Michael Nelpper | \$795,518 | \$868,394 | | | | | |
| \$ | | Robert Zere | \$722,740 | 5626.945 | | | | | |
| _ | | Laura Guesard | \$992,059 | \$574,472 | | | | | |

The Create Names from Selection dialog box appears.

Select the setting or settings that correspond to where the text labels are located in the selected range (changes to).

If Excel has activated a check box that does not apply to your data, click it (\square changes to \square).

3) Click **OK**.

Excel assigns the text labels as range names.

B When you select one of the ranges, the range name assigned by Excel appears in the Name box.

Note: If the label text contains any illegal characters, such as a space, Excel replaces each of those characters with an underscore (_).

C A data range with labels in the top row and left column Is known as a table. To assign a name to a table, type a label in the top left comer. When you run the Create from Selection command on the entire table, Excel assigns the top left label to the data range.

| Sale | HLAND B 5 16 TH | ency Reekarle | 6 | | | | | |
|------------|---------------------|---------------|------------|---|---|---|----|----|
| | 4 | ç | | e | P | 6 | H. | 1. |
| 2 | Sales Rap | 2009 Sales | 2013 Sales | | | | | |
| 3 | Nancy Presihafor | \$996,336 | \$960,492 | | | | | |
| 4 | Andrew Cencini | \$606.731 | 5171,983 | | | | | |
| | Las Kotas | \$622,793 | \$967,580 | | | | | |
| 6 | Mariya Sergierika | \$765,127 | \$771,399 | | | | | |
| 7 | Steven Thorpe | \$843.589 | 5821215 | | | | | |
| 8 | Michael Nelsper | \$795.518 | 5669.394 | | | | | |
| | Robert Zare | \$722,340 | \$626.945 | | | | | |
| 18 | Leura Gisseni | 5992.059 | 5574.472 | | | | | |
| 13 | Anne Wellung Larsen | \$659,880 | 5821,982 | | | | | |
| 12 | Ryta Harper | \$509,623 | 5549-609 | | | | | |
| 13 | David Ferry | \$567,377 | \$156.605 | | | | | |
| | Peal Veyetris | \$685,091 | 5682182 | | | | | |
| 1.5 | Andrea Agter | \$540,484 | \$683,762 | | | | | |
| 15 | Charles Granak | \$650,793 | \$823.034 | | | | | |
| 12 | Karen Allaton | \$509.843 | 5111.568 | | | | | |
| | Karen Hammond | \$503.699 | \$975.455 | | | | | |
| 19 | vince Outlin | \$650,263 | \$199.514 | | | | | |
| | Paul Richardson | \$779,722 | 5396,333 | | | | | |
| | Gregg O'Donogiwe | \$5982.802 | \$662.171 | | | | | - |
| 2 | | - | | | | | | - |
| to a la se | Sheet1 / 52 / | | 34(| | - | | | 10 |

| | GDP_Growth | • (*) | | ,fa i | 1.9 |
|---|----------------|--------|------|-------|-----|
| | A | в | C | D | |
| 1 | 6DP Growth C | 004 | 2003 | 2002 | |
| 2 | Canada | 2.9 | 2 | 3.4 | L |
| з | France | 2.3 | 0.8 | 1.2 | Ł |
| 4 | Germany | 1.6 | 0 | 0.2 | E |
| 5 | United Kingdom | 3.1 | 2.2 | 1.6 | L |
| 6 | United States | 4.2 | 3.1 | 1.9 | L |

Create Names from Selection

ór: Canal

Correct Laborator

Citizet cole

You can use a keyboard shortcut to open the Create Names from Selection dialog box. Select the range or ranges you want to work with and then press Ctrl + Shift + F3.

NAVIGATE A WORKBOOK USING RANGE NAMES

One of the big advantages of defining range names is that they make it easier to navigate a worksheet. You can choose a range name from a list and Excel automatically selects the associated range. This is much faster than scrolling through a workbook by hand or by entering a cell or range reference into Excel's Go To command.

Excel offers two methods for navigating a workbook using range names: the Name box and the Go To command.

Navigate Using the Name Box

- Open the workbook that contains the range you want to work with.
- 2 Click the Name box 🗔.
- Click the name of the range you want to select.



62

Excel selects the range.

| 1 4 7 . | [0,+10] | | | Sale | e Rage Sales | - Mos | ent lool 🔶 | | | - londs | |
|--------------------------|-----------------------------|-------------------------------|-----------|-----------|------------------------------------|---------------|--|----------|---|---------|--------|
| 144 | 004 1 | hand B | de la sul | Astenular | Outs | Feries | Vice De | elept | | • 0 | - 0 1 |
| ndi V | Californi B. J. III.* | - ш ц - К э- <u>А</u> - | 1.0 | · · · | Second 8 - % 58 dS Hanton | 1.1.1 | Constitional from Promation Table Coll Styles + Study | nating * | (Prinzet - Stander - Deleter - Cells | H | A Dest |
| N1 | | - | - 2 | | | | | | | | |
| 2009_Selec 2000_Selec | | 4 | -3 | 0 | | P | 6 | н | 1 | 2 | 4 |
| 4 | | | | | | | | | | | |
| 5 | | | | | | | | | | | |
| 6 | | | | | | | | | | | |

| | 4 | | C | D | | 4 | 14. | _ |
|-----|---|--------------------|------------|------------|-------|---|-----|----|
| 1 | | | | | | | | |
| 2 | | Sales Rap | 2009 Sales | 2010 Sales | | | | |
| 3 | | Nancy Preshafor | \$996,356 | \$960,492 | | | | |
| | | Andrew Cencini | \$606.731 | 5177,583 | | | | |
| | | Les Kotes | \$622,793 | \$967,580 | | | | |
| 6 | | Mariya Sergierika | \$765,127 | \$771,399 | | | | |
| 7 | | Steven Thorpe | \$843.589 | 5827,215 | | | | |
| 8 | | Michael Nelsper | \$795.518 | \$669,894 | | | | |
| | | Robert Zare | \$722,340 | \$626.945 | | | | |
| 2.0 | | Leura Glasseni | 5992.059 | 5574,472 | | | | |
| 10 | | Ame Wellung Larsen | \$659,880 | \$827,882 | | | | |
| 12 | | Byta Harper | \$509,623 | \$549,609 | | | | |
| 13 | | Devid Ferry | \$967,377 | 5558.001 | | | | |
| 14 | | Real Veyetzis | \$685,091 | \$682,182 | | | | |
| 1.5 | | Andrea Asser | \$540,484 | \$683,762 | | | | |
| 15 | | Charles Granak | \$650,793 | \$823.094 | | | | |
| 12 | | Karen Allation | \$999,863 | 5111.049 | | | | |
| 1.0 | | Karen Hammond | \$503.699 | \$975,455 | | | | |
| 2.9 | | vince Durbin | \$650,263 | \$199,514 | | | | |
| 20 | | Paul Richardson | \$179,722 | \$196,353 | | | | |
| 33 | | Gregg O'Donoghue | \$592.802 | \$662.371 | | | | |
| | | (MHR / 19/ | | 84 | - | | - | 10 |



Note: You can also select the Go To command by pressing **Ctrl**+**G**.

The Go To dialog box appears.

- Click the name of the range you want to select.
- 🙆 Click **OK**.

Excel selects the range.

| 21 | J 9 . C | | Loans | - Mennalt & | | Deelser | | |
|----|------------------------|--------------|------------|-------------|-----------|-------------|----|----------------------|
| | A Canet | | 10 an | 5 8 | | ismalling * | | 3 - 2 - 4 |
| | A1 * (* | A Loan | Payment An | elorie | | | | Saulas- |
| 4 | A | | C 0 | 1 | F. | (4)- | | gen. N |
| 1 | Loan Payment An | lysis | Pario | Principal | Interest | Tetal | | Go To Special. NY |
| 2 | Interest Rate (Annual) | 6.00% | 1 | (\$343.30) | (\$50.00) | (\$195.33) | | As major |
| 3 | Periods (Years) | 5 | 2 | (\$144.04) | (\$49.38) | (\$189.93) | | Gagmants |
| 4 | Principal | \$18,000 | 3 | (\$144.76) | (\$49.56) | (\$190.00) | | Constional Formation |
| 5 | Monthly Payment | (\$593.33) | 4 | (\$345.49) | (\$47,84) | (\$195,50) | | dominents |
| 6 | Total Lean Cests | (\$3,599,681 | 5 | (\$146.32) | (\$47.11) | (\$153.30) | | Outs Universities |
| 3 | | | 6 | (\$146.95) | (\$46.38) | (\$19).10) | | |
| 0 | | | 7 | (\$147.64) | (\$45.65) | (\$193.30) | 1 | Lateril Objects |
| 5 | | | 8 | (5348.42) | (\$44.51) | (\$155.53) | 79 | Selection (Sane |
| 10 | | | | (\$149.16) | (\$44.17) | (\$193.30) | | |



| | Scenario1 = (* | ,C Intere | ot Flate - | konvel . | | | | | | |
|---|------------------------|------------|-------------|----------|------|---|---|----|---|---|
| | A | 0 | - Q - | D | - C. | 1 | 0 | 18 | 1 | 1 |
| 4 | Loan Payment Anal | lysis | | | | | | | | 1 |
| 2 | - | | | | | | | | | |
| 3 | Scenario #1 | | | | | | | | | |
| 4 | Interest Rate (Annual) | 6.00% | | | | | | | | |
| 5 | Periods (Years) | 5 | | | | | | | | э |
| | Principal | \$10,000 | | | | | | | | |
| 3 | Monthly Payment | (\$193.33) | | | | | | | | |

Navigate to a Range in Another Workbook

- Follow Steps I to 4 above to display the Go To dialog box.
- 2 In the **Reference** text box, type the following:

'[workbook]worksheet'!name

Replace *workbook* with the file name of the workbook, *worksheet* with the name of the worksheet that contains the range and *name* with the range name.





CONTENTS

- 66 Change the Font and Font Size
- 68 Apply Font Effects
- 70 Change the Font Colour
- 72 Align Text Within a Cell
- 74 Centre Text Across Multiple Columns
- 76 Rotate Text Within a Cell
- 78 Add a Background Colour to a Range
- 80 Apply a Number Format
- 82 Apply an AutoFormat to a Range
- 84 Apply a Conditional Format to a Range
- 86 Apply a Style to a Range
- 88 Change the Column Width
- 90 Change the Row Height
- 92 Wrap Text Within a Cell
- 94 Add Borders to a Range

FORMATTING EXCEL RANGES

Microsoft Excel 2010 offers many commands and options for formatting ranges and you learn about most of them in this chapter. For text, you learn how to change the font, the font size, the colour and the alignment, as well as how to centre text across columns and rotate text within a cell. You also learn how to change the background colour, apply a number format, apply an AutoFormat and a style, change the column width and row height, add borders and more.



CHANGE THE FONT AND FONT SIZE

When you work in an Excel worksheet, you can add visual appeal to a cell or range by changing the font and font size.

In this section, the term *font* is synonymous with *typeface* and both refer to the overall look of each character. By default, Excel offers nearly 200 different fonts in a wide variety of styles. The font size is measured in *points*, where there are roughly 72 points in an inch. In some cases, formatting a range with a larger font size can make the range text easier to read.

Select the range you want to format.

- Click the **Home** tab.
- 3 To change the typeface, click ⊡ in the **Font** list and then click the typeface you want to apply.

Excel applies the font to the text in the selected range.

| 1 1 1 1 1 1 | | Los | u - Micreoft I | last | | | 10 0 T |
|-------------|------------------------|------------|----------------|----------------|-----------|---------------|-------------------|
| 100 | 2 | multi D | the finites | Men I | Developer | | - 0 - 0 1 |
| 10% X | Tenet New Water 12 | 2 14 | - 1 I | Canality and P | + problem | peterst . E . | Dr .00 |
| Parts and | Thereise Parity | | 5.4.3 | Count of the | de i | 28 Dante - 2 | Xi uru |
| | T Cambria | Planding 3 | 12 4 | Call Dyles + | | Frond + (2- | Faller - Latest - |
| Sphere is | T Cullor | (finda) | 100 10 | 974 | _ | 1999 | detrong |
| A1 | All Parks 3 | | lata | | | | |
| | The Appropriate | | 1 | 1 | Ğ. | н | 1 |
| Initial M | * Aharoni 1 | NET TH | | | | | - |
| interest | * ALGERIAN | | | | | | |
| | W Andalas | ليحمد | | | | | |
| - | T Aquative | stal | | | | | |
| | T Againstit | wind | | | | | |
| U | * ADDET | dement. | | | | | |
| wartiz | The Andre Toponomeg | العمر | | | | | |
| | * Arial | - | | | | | |
| | | | | | | Cumulative | Cursulative |
| Arear | | | Payment | Principal | Internet | Principal | Internet |
| | * Arial Namper | | | | | | 156.000.00 |
| | * Arial Rounded MT Bol | d | | (\$1,912.01) | | | (\$11,890,61 |
| | * Anal Unicode MS | | | (\$2,047.95) | | | (517,665.36 |
| | * Bakerille Old Face | | | (52,170,85) | | | (\$25,517,20 |
| | * Batang | | | (\$2,805.08) | | | (128,838,79 |
| | * BatangChe | | | (\$2,188.67) | | | |
| | 'T Benhow 95 | | Sedewn Are | | | | *11 |
| 151 | 197 | | | | 100 | | |

| 811 | a 49 + (1 + (a | | | Loans - Mi | on aft | acel | | | 100100 | -0- |
|------|--|-------------|-------------|-------------------------|---------|---|-----------|---|---|-------|
| - 11 | man had a | lage Layout | Permate: | Della | Berlevi | Vater | Developer | | + Q = | 0.1 |
| 1022 | A Caller - 12 2a - 2 11 - A 4 - 2a - A - | 1.00 | | 6 - % 51.21 Notes | • 18 | Constituenal Formul as Ta Cell Signes * Sign | | Provent - Provent - Diterest - Com | 2 - 27 2 - 264 4 1 (2 - 7689 - 1 (2 - 7689 - 1 | A los |
| | A1 + (* | A 10 | itial Mortg | ege Deta | | | | | | - |
| | A | D | 6 | D | | F | 0 | 18 | 1 | L. |
| 1 | initial Montgage Date | | | | | | | | | - 6 |
| 2 | Interest Rate (Annual) | 6.00% | | | | | | | | |
| 3 | Amortization (Years) | 25 | | | | | | | | |
| 4 | Term (Yeand) | 5 | | | | | | | | |
| ĥ | Principal | \$108,000 | | | | | | | | |
| 6 | Payment Type | 0 | | | | | | | | |

- To change the font size, click in the **Font Size** list and then click the size you want to apply.
 - You can also type the size you want in the Size text box.

| 21 | 10 - D - R | | | Los | ns - Micreeoft | Gegal | | | to to =0 |
|----|---|-----------------|------------------|-----------|----------------|---|------------------|---|--------------|
| 1 | | Tage Layout | 10 | | the finites | liter 1 | Developer | | |
| | A - 0000 | | -4 | 1- 8 5 | - 16 + 3 | Constant of Tal Constant of Tal Contrajon + 2010 | 64. ¹ | Plant - I - Plant - I - Plant - I - Crit | 2r ana |
| | A1 + 🕐 1 | | INEW Me | | Deta | | | | |
| | A | D | 0 | D | 1 | / | 0 | н | 1 |
| 1 | Initial Montgage Data | | | | | | | | |
| Ł | Interest Rate (Annus) | | | | | | | | |
| ٤. | Amortisation (Year : | | | | | | | | |
| 1 | Term (Year 1 | | | | | | | | |
| ł. | Princip | 0,000 | 1 | | | | | | |
| ş. | Payment Typ | | | | | | | | |
| 6 | Amertization Schedul | - | | | _ | | | | |
| | Amortization Year | Term. Pariad | Interest Rate | NPER | Payment | Principal | Internet | Completive Principal | Cursulative |
| 10 | 0 | 0 | | | | | | | |
| 11 | 1 | 1 | 6.0% | 25 | (\$7,822.67) | (\$1,812.47) | (\$4,000.00) | (\$1,822.47) | 156.000.00 |
| t2 | 3 | 2 | 6.0% | 25 | (\$7,822.67) | (\$1,982.00) | (\$5,890.64) | (\$8,754.70) | (\$11,890.64 |
| 10 | 3 | 3 | 6.0% | 25 | (\$7,822.67) | (\$2,047.95) | (\$5,774.72) | (55,802.66) | (\$17,645.3) |
| 4 | 4 | 4 | 6.0% | 25 | (\$7,822.67) | (\$2,170,85) | (\$5.65L84) | (57,979,49) | (\$23,317,2) |
| 16 | 8 | 8 | 6.0% | 28 | (\$7,822.67) | (\$2,801.08) | (\$5,521.58) | (\$10,274.57) | (128,838.7) |
| 16 | 6 | 1 | 7.0% | 20 | (\$8,489,45) | (\$2,188.67) | (\$6,280.78) | (\$12,463.24) | (\$15,119,57 |
| 1 | a a a Mortgage Amortia | ation Schu | edule / 1 | himper | e Parstewn Ana | 60 []+[] | 4 | | ¥1 |
| n. | 1 min | | | | | | 1 100 120 2 | - (-) and (-) | D (4) |

B Excel applies the font size to the text in the selected range.

| 111 | - 0 + 0 + (e | | | Loans - M | icrees | dt Eveni | | | head \$20 million | 0 |
|-----|--|-------------|----------|-----------------------------------|--------|---|-----------|--|-------------------|------|
| 18 | mane bland P | lage Layout | Permuter | Date | Revie | eu Més | Developer | | - O - d | P 23 |
| 10 | A Contact - La Contact - La Contact - La A Contact - La Contact - La | | 1 - B | Estant 8 - % 58 /8 Notes | | Constant Constant Colligion - Tale | Ade * | (in the second s | E - 27 A | 1 |
| | A1 + (* | A 141 | al Monte | ege Deta | | | | | | - |
| 1 | A | B | 0 | D | E | 1 | ů. | н | 1 | |
| 1 | nitial Mortgage | | | | | | | | | 1 |
| | Interest Rate (Annual) | | | | | | | | | |
| 3 | Amortization (Years) | 25 | | | | | | | | |
| 4 | Term (Years) | 5 | | | | | | | | |
| 6 | Principal | \$100,000 | | | | | | | | |
| 6 | Payment Type | 0 | | | | | | | | |
| | | | | | | | | | | |

A

When you create a workbook, Excel automatically applies a document theme, which includes predefined fonts, to the workbook. The theme's default font is referred to as Body and is used for regular worksheet text. Each theme also defines a Headings font, which Excel uses for cells formatted with a heading or title style. You can change the default font and font size by clicking the File tab and then Options to open the Excel Options dialog box. Click the General tab, click the Use this font \Box , and then click the typeface you want to use as the default. Click the Font size \Box and then click the size you prefer to use as the default. Click OK.

APPLY FONT EFFECTS

You can improve the look and impact of text in an Excel worksheet by applying font effects to a range.

Excel's font effects include bold, italic, and underline, which are available on the Ribbon for easy application. Excel also offers a dialog box tab that includes many more font effects, including special effects such as strikethrough, superscripts, and subscripts. In most cases, you should not need to apply more than one or two font effects at a time. If you use too many effects, it can make the text difficult to read.

Select the range you want to format.

- Click the **Home** tab.
- 3 To format the text as bold, click the **Bold** button (**B**).
 - Excel applies the bold effect to the selected range.
- To format the text as italic, click the **Italic** button (☑).
- 5 To format the text as underline, click the **Underline** button (I).
 - B Excel applies the effects to the selected range.
- 6 Click the Font dialog box launcher (^[]).

| 2 La ma (1 + 14 | | Present V | Nue Calculator | Morest | Eved | | | 0 | (1) - X |
|---|----------------|-----------|--|-----------|----------------|-------|---------------------------------------|----------|----------------|
| The Manuel | - 2 | ormutal. | Data Rev | aw the | · Daves | 1941 | | + 6 | - # 1 |
| | -3 | | Serent - 5 - % + 51 23 Notice - 5 | (ji cardy | t as Thefter * | tog - | Print - Print - Print - Cris | N. S. S. | |
| Al | * Free | ent Walks | e Calculator | | | _ | | | |
| A (| 8 | C | 0 | E | F | 0 | н | 1 | 1.15 |
| Present Value Present Value Present Value Autore Value Inflation Rate Vers fram Nove Vers fram Nove Verse fram Nove T | \$1,00.0F | | | | | | | | |
| P * * * * * sheet1 / P heaty 53 | ct. chere: she | | | 10 | Court 1 | | a sen (- | 0 | 1 |

| 5 | Prese | et Value Calo | Ador - | Morraft 5 | eed. | | 0.0 | 1.0 |
|---|-----------------|------------------------------------|--------|--|------------|---|----------------------------------|--------|
| The Mone In the Page | alayout Formute | 0.00 | Renta | w Men | Developer. | | | |
| And | -6 | 5 - 5 5 - 5 51 - 5 54 - 5 | | El constru El constru El constru Construiro | e fladie * | Prinat * Prinat * Siferat * Cels | 1 . 21 1 . 501 h 1 . 501 h | A feet |
| AL TO | Present to | alue Calcul | ator | | | | | |
| Present I. Celculet | | C I | 2 | E | F 0 | н | 1 | 35 |
| 2 Puture Value | \$100,000 | | | | | | | |
| 3 Inflation Rate | 2% | | | | | | | |
| 4 Years from Now | 20 | | | | | | | |
| Value in Taday's Dollars | \$67,297 | | | | | | | |
| | | | | | | | | |
| 6 | | | | | | | | |
| | | | | | | | | |
| 7 | | | | | | | | |
| 7 8 9 | | | | | | | | |
| 8 | ut the | | | | | | | |

The Format Cells dialog box appears with the Font tab displayed.

- To format the text as strikethrough, click
 Strikethrough (
 changes to
).
- 8 To format the text as a superscript, click **Superscript** (
 changes to
).
 - To format the text as a subscript, click **Subscript** (
 changes to
).

| 0 | Click | ОК |
|---|-------|----|
| S | | UN |

Excel applies the font effects.

| | Ferral Cells |
|-----|--|
| | laster Algeneri Port Beter Fil Protector |
| | Brit Pyrister Sm |
| | Galon Bold halo (14 |
| | Texantria Insetração - Regular - 18 |
| | 1 (MA) (MA) |
| | The second secon |
| | Te Aprian v v iš v |
| | Underline: Otori |
| | Single I Second for |
| | Men Perts |
| 7)- | 2 Driphtagh |
| | Elegent Authorityda |
| | E Signat |
| | C. Martin |
| | |
| | |
| | |
| | |
| | |
| | DX. Canoni |
| | |
| | |
| | |
| | Ferred Cells |
| | Juster Algeners Part Bester PE Paterion |
| | |
| | Det Pyristier Ser |
| | Gelori Bolt halo (H |
| | Triantra (readrag) - Hapler - 18 - |
| | \$ Apence #8 - Bull 12 |
| | Pulania di |
| | Taronia a la s |
| | goletre: Giler |
| | Single Ender State |
| | Men Peres |
| | 12 Delphinagh |
| 8 – | 2 Sugaran Automate |
| | E Suborat |
| | |
| | C |
| | This is a "turitype tord. The same fact of be used an both your printer and your scheer. |
| | |
| | |
| | |
| | |
| | |
| | 9 -> ox Cent |

 \checkmark

Excel supports the following keyboard shortcuts for applying font effects: Ctrl+B toggles the selected range as bold; Ctrl+D toggles the selected range as italic; Ctrl+U toggles the selected range as underline; Ctrl+G toggles the selected range as strikethrough.

CHANGE THE FONT COLOUR

When you build an Excel worksheet, you can add visual interest to the sheet text by changing the font colour.

By default, each Excel workbook comes with a theme applied and you can change the font colour by applying one of the colours from the workbook's theme. You learn more about workbook themes in Chapter 7. You can also select a colour from Excel's palette of standard colours or a custom colour that you create yourself.

Select a Theme or Standard Colour

- Select the range you want to format.
- 2 Click the **Home** tab.
- 3 Click in the Font Color list (▲).
- 4 Click a theme colour or one of Excel's standard colours.
 - Excel applies the colour to the range text.

| 2] | | Budget Dat | a - Micealt Isol | | - 10 - C |
|-----|---|---------------|-----------------------|---|----------|
| | 🖿 non 🖛 2 lagest ree | mular Data | Review View Developer | | |
| 100 | | 10 Lavar | N * Bromat as Table * | Prinad - Pripade - Dromat - Catt | E - 27 A |
| | Al + A Predu | ct Name | | | |
| | A | 0 | C | | 0 |
| 1 | Product Name | Units | \$ Total | | |
| 2 | Northwind Traders Airsonds | 20 | 200 | | |
| 3 | Northwind Traders Seen | 487 | 6830 | | |
| 4 | Northwind Taskers Baysenberry Spread | 100 | 2560 | | |
| 5 | Northwind Traders Cajus taxaoning | 40 | 880 | | |
| 6 | Northwind Tradem Chail | 40 | 720 | | |
| 7 | Northusind Teaders Chocalate | 200 | 2550 | | |
| 8 | Northwird Traders Chornlate Biscalts Mix | 85 | 782 | | |
| 9 | Northwind Tradees Clars Chouder | 290 | 2788.5 | | |
| 20 | Northwind Traders Califie | 650 | 29900 | | |
| 11 | Northwind Taskers Cash Meat | 120 | 2206 | | |
| 1 | T # / Top-Bottom Printlant Sales / Dop | 10 / Sales Ra | a 76 / 04 / a | | 10 |
| Re. | + 2 | | Court 3 🔤 | (a) see (| 0 00 |



Select a Custom Colour

- Select the range you want to format
- Click the **Home** tab. 2
- 3 Click 🖃 in the **Font Color** list (A).
- Click More Colors. 4

| 21 🖬 🕫 + (1 +) # | utiget Bata - | Monut Los | | | and the second | |
|--|---------------------------------------|------------|---|---|----------------|----|
| The second second second | Date | finites 10 | to Developer | | -9-8 | - |
| | Second S - % Sd - dl Scotter | | Alamad Formaliting * Al as Table * Alam * 2044 | Print - Piterie - El Pont - Catt | Bart & Bart I | - |
| A2 Theme Optom | wders Air | nonda | | | | - |
| | 0 | C | 0 | | 0 | T, |
| 1 Product Name | 15 | \$ Total | | | | |
| 2 Porthwind Tradees Ali | | 200 | | | | |
| 5 Northwind Traders De | | 68.10 | | | | 1 |
| 4 Northaded Taskers Be | | 2000 | | | | |
| 5 Rorthwind Traders Ca | - | 4 | | | | |
| 5 Northwind Traden Chev | | 2590 | | | | |
| 8 Perthesind Traders Chevalate Riscal's Min 85 | - | 782 | | | | |
| 9 Northwind Traders Clars Chowder | | 2788.5 | | | | |
| 10 Northwind Traden Caffee 650 | | 29900 | | | | |
| 11 Northwind Traders Crab Meat 120 | | 2208 | | | | 1 |
| R 4 R B / Soulistan Predect false / Granth / | Sales Repo | 782/ 8 | 4 | | | Ø. |
| traip 🖾 | | | Court 24 | (illiners) | 9 0 0 | 8 |

The Colors dialog box appears.

- Click the colour you want to use. 5
 - B You can also click the **Custom** tab and then either click the colour you want or enter the values for the Red, Green, and Blue components of the colour.

Click **OK**. 6

Excel applies the colour to the selected range.



STOP Do not use many different typefaces in a single document. Stick to one, or at most two, typefaces to avoid the ransom note look.

If you change the text colour, be sure to leave enough contrast between the text and the background. In general, dark text on a light background is the easiest to read.

ALIGN TEXT WITHIN A CELL

You can make your worksheets easier to read by aligning text and numbers within each cell. By default, Excel aligns numbers with the right side of the cell and text with the left side of the cell.

You can also align your data vertically within each cell. By default, Excel aligns all data with the bottom of each cell but you can align text with the top or middle.

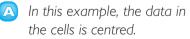
Align Text Horizontally

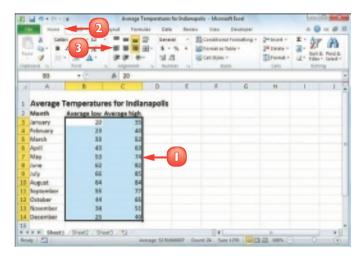
- Select the range you want to format.
- 2 Click the **Home** tab.
- In the Alignment group, click the horizontal alignment option you want to use:

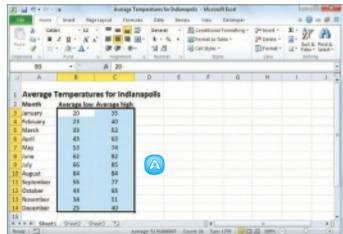
Click **Align Text Left** (I) to align data with the left side of each cell.

Click **Center** (\blacksquare) to align data with the centre of each cell.

Click **Align Text Right** (I) to align data with the right side of each cell.







Align Text Vertically

- Select the range you want to format.
 - Click the **Home** tab.

2

3

In the Alignment group, click the vertical alignment option you want to use:

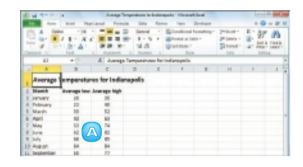
Click **Top Align** (\blacksquare) to align data with the top of each cell.

Click **Middle Align** (\blacksquare) to align data with the middle of each cell.

Click **Bottom Align** (\blacksquare) to align data with the bottom of each cell.

- A
 - In this example, the text is aligned with the middle of the cell.

| 2] | M | | A mag | e Tampe | ratues: for 3 | ndan | updis - Microso | rh Excel | | 10 | 0.0 |
|--------|--|---|---|----------------|-------------------------|-------|--|-----------|--|----|--------|
| | te Hand | - 2 | Layout Pa | and the second | Dete | Envir | eu liteu | Developer | | | 0-01 |
| | | | | 10 10 1 | 6 - % 31 21 50000 | | Constant Providence Constant Providence Pro- | ale * | Prinad - Prinad - Dramat - Cast | | A Peet |
| | A1 | + (* | A Aver | ape Terr | perature | s fer | Indianapolita | | | | - |
| | A | 8 | C | | D | 1 | 1 | G | H | 1 | 1 1 5 |
| | | | | | | | - | | | | |
| 1 | Average | emperatur Average low | | | olis 🚽 | - | • | | | | |
| 1 2 3 | | | | | olis | - | • | | | | |
| | Marth | Average low | Average hig | | olls | - | - | | | | |
| 3 | Marth Jensery | Average low 20 | Average hig 35 | | olls | - | - | | | | |
| 3 4 | Marth Jensery Rebruery | Average low 20 23 | Average hig 35 40 | | olis 🚽 | - | • | | | | |
| 345 | March Jenuary Rebusry March | Asserage lose 20 25 33 | Average hig 35 40 52 | | olis 🚽 | - | • | | | | |
| 3456 | Marth Jenuary Rebuary Marth April | Aserage low 20 23 33 43 | Average hig 35 40 52 63 | | olis | • | - | | | | |
| 34567 | Marth January Fabruary Marth April May | Asserage low 20 28 38 43 55 | Average hig 35 40 52 63 74 | | olis | • | • | | | | |
| 345678 | Marth Jenuery Rebuery Marth April May June June July | Average low 20 23 83 43 53 62 | Average hig 35 40 52 65 74 82 82 | | olis 🚽 | • | • | | | | |



 \checkmark



Justified text aligns with both the left and right sides of the cell. Select the range, click the Home tab and then click in in the Alignment group. The Format Cells dialog box appears with the Alignment tab displayed. In the Horizontal list, click \bigcirc and then click Justify. Click OK. To indent cell text, select the range you want to indent, click the Home tab and then click in the Alignment group. In the Alignment tab, click the Horizontal list I and then click Left (Indent). Use the Indent text box to type the indent, in characters, and then click OK. You can also click the Increase Indent (I) or Decrease Indent (I) buttons in the Home tab's Alignment group.

CENTRE TEXT ACROSS MULTIPLE COLUMNS

You can make a worksheet more visually appealing and easier to read by centring text across multiple columns. This feature is most useful when you have text in a cell that you use as a label or title for a range. By centring the text across the range, it makes it easier to see that the label or title applies to the entire range.

- Select a range that consists of the text you want to work with and the cells across which you want to centre the text.
- 2 Click the **Home** tab.
- In the Alignment group, click the dialog box launcher ([]).

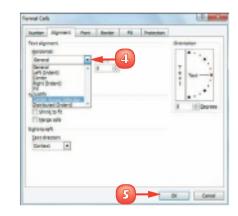
| | .Jan | Fub | Mar | Apr | May | Jun | Jul | Aug | 34p | DH | New | Dec | |
|---------------|---------|--------|---------|--------|--------|--------|---------|--------|--------|--------|---------|--------|--|
| Cost of Goods | 6,132 | 5,964 | 6,300 | 6,686 | 6,680 | 6,572 | 6,720 | 6,100 | 6,000 | 6,800 | 6,300 | 6,100 | |
| Advertising | 4,601 | 4,200 | 5,200 | 5.000 | 5,500 | 5,250 | 5.500 | 5,290 | 5,200 | 4,500 | 5,200 | 5,290 | |
| Rent | 2,180 | 2,100 | 2,500 | 2,300 | 2,180 | 2,500 | 2,300 | 2,100 | 2,100 | 2,500 | 2,300 | 2,180 | |
| Supplies | 1,380 | 1,200 | 1,400 | 1,300 | 1,190 | 1,408 | 1,300 | 1,480 | 1,400 | 1,258 | 1,350 | 1,480 | |
| Salaries | 36.000 | 16,000 | \$6,500 | 36,580 | 16,500 | 17,800 | \$7,080 | 17,000 | 17,000 | 17,000 | \$7,580 | 17,500 | |
| Shipping | 14,290 | 13,750 | 14,500 | 15,000 | 14,500 | 14,750 | 15,080 | 14,500 | 14,500 | 15,750 | 15,250 | 14,500 | |
| Utilities | 580 | 600 | 600 | 580 | 600 | 450 | 650 | 680 | 608 | 650 | 600 | 600 | |
| TOTAL | -04,893 | 43,694 | 45,680 | 47,066 | 47,850 | 47,722 | 48,270 | 47,500 | 47,300 | 48,130 | 48,300 | 47,600 | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

| 2 | | | 2 | ent 1 | (amutal | Dubled (17) | · More | | | unter . | | | - 0 | | 1 |
|-------|---------------|----------------------------|--------|---------|----------|---------------------|--------|--------|--------------|----------|--|---------|--------|----|---|
| 1 2 1 | | 11 - 1 (01 - 12 Food | N N | ** | | 5 - 5 - 51 -2 | 5 1 | | et ac Thethe | - esting | 2-10 2-10 2-10 2-10 2-10 2-10 2-10 2-10 | 181 - 1 | · Zr | A | |
| | 01 | | | 5 Do | ienses B | ly Month | | | | | | | | | |
| | A | 8 | C | 0 | ÷ | F | 0 | | | - 2 | × | L | M | 11 | |
| 1 | | Expe | nses | By M | onth | | | | | | | | | | |
| 2 | | Jan | Feb | Mar | Apr | May | Jun. | Jul . | Ave | Sep | Ort | Nev | Dec | | |
| 3 | Cest of Goods | 6,182 | 5,984 | 6.300 | 6,606 | 6,600 | 6.572 | 6,720 | 6,800 | 6.300 | 6,880 | 6,900 | 6,900 | | |
| 4 | Advertising | 4,681 | 4,200 | 5,200 | 5,080 | 5,500 | 5,258 | 5,580 | 5,280 | 5,208 | 4,500 | 5,280 | 5,208 | | |
| 5 | Rent | 2,100 | 2,500 | 2,500 | 2,100 | 2,100 | 2.500 | 2.300 | 2,180 | 2.500 | 2,500 | 2,100 | 2,100 | | |
| 6 | Supplies | 1,380 | 1,208 | 1,400 | 1,380 | 1,250 | 1,400 | 1,300 | 1,480 | 1,408 | 1,350 | 1,150 | 1,408 | | |
| 7 | Salaries | 16,008 | 16,000 | \$6,580 | 16,500 | 16,500 | 17,000 | 17,080 | 17,008 | 17,800 | 17,080 | 17,500 | 17,500 | | |
| 8 | Shipping | 14,250 | 13,750 | \$4,500 | 15,000 | 14,500 | 54,750 | 15,000 | 14,500 | \$4,500 | 25,750 | 15,250 | 14,500 | | |
| ۶. | Utilities | 580 | 600 | 800 | 550 | 600 | 650 | 650 | 600 | 600 | 650 | 680 | 608 | | |
| 10 | TOTAL | 44,883 | 49,894 | 46,600 | 47,066 | 47,060 | 47,722 | 48,270 | 47,300 | 47,180 | 48,190 | 48,900 | 47,600 | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | - | | | | | _ | | | | | | _ | 2 |
| - | 4 53 | spenses. | - | | | | | | 4 | 1000 | 100 | - C) 10 | 12 | 1 | |

Excel opens the Format Cells dialog box with the Alignment tab displayed.

Click the Horizontal and then click Center Across Selection.

🖪 Click **OK**.



Excel centres the text across the selected cells.

| | A. | | 0 | 0 | _ | 1 | - 0 | 18 | | 1 | 5 | | | N | |
|-----|---------------|---------|--------|---------|--------|--------|--------|---------|--------|--------|--------|--------|--------|---|----|
| 1 | | | | | | Expe | nses | By M | onth | | | | _ | | |
| \$ | | Jan | Fub | Mar | Apr | May | 2019 | Jul | Aug | Sep | 0/1 | New | Dec | | |
| 3 | Cost of Goods | 6,132 | 5,964 | 6,300 | 6,686 | 6,680 | 6,572 | 6,720 | 6,380 | 6,500 | 6,800 | 6,300 | 6,380 | | |
| 4 | Advertising | 4,601 | 4,200 | 5.200 | 5.000 | 5,500 | 5,250 | 5.500 | 5,290 | 5,200 | 4,500 | 5.200 | 5,290 | | |
| 6 | Rent | 2,180 | 2,100 | 3,500 | 2,300 | 2,180 | 2,508 | 3,300 | 2,180 | 2,100 | 2,508 | 2,300 | 2,180 | | |
| 6 | Supplies | 1,380 | 5,200 | 1,400 | 1,300 | 1,190 | 1,400 | 1,300 | 1,480 | 1,400 | 1,258 | 1,350 | 1,480 | | |
| 7 | Salaries | 36,000 | 16,000 | 56,500 | 36,580 | 16,500 | 17,000 | \$7,080 | 17,000 | 17,000 | 17,000 | 17,580 | 17,500 | | |
| 5 | Shipping | 14,299 | 13,750 | \$4,500 | 15,000 | 14,500 | 14,750 | 15,080 | 14,500 | 14,500 | 15,750 | 15,250 | 14,500 | | |
| 6 | Unintes | 580 | 608 | 600 | \$80 | 600 | 650 | 650 | 680 | 600 | 650 | 600 | 600 | | |
| 10 | TOTAL | 44,883 | 43,634 | 45,680 | 47,066 | 47,850 | 47,722 | 48,270 | 47,500 | 47,300 | 48,130 | 48,300 | 47,600 | | |
| 11 | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | en el Salen E | sperses | 12/ | | | | | - 1 | 4 | _ | | _ | _ | | 6 |
| le, | w 23 | | | | | | | | | | H 100 | 5 O- | -0- | | 0. |



An easier way to centre text across multiple columns Is to follow Steps I and 2 and then, in the Alignment group, click the Merge & Center button (Im). Excel merges the selected cells into a single cell and centres the text within that cell. (See Chapter 3 to learn more about merging cells.)

ROTATE TEXT WITHIN A CELL

You can add visual interest to your text by slanting the text upward or downward in the cell. You can also use this technique to make a long column heading take up less horizontal space on the worksheet.

Excel offers several predefined rotations, such as Angle Counterclockwise, which angles text upward at a 45-degree angle, and Rotate Text Up, which displays the text vertically with the letters running from the bottom of the cell to the top. You can also make cell text angle upward or downward by specifying the degrees of rotation.

- Select the range containing the text you want to angle.
- Click the **Home** tab.
- Click Orientation (💌).

If you want to use a predefined orientation, click one of the menu items and skip the rest of the steps.

Click Format Cell Alignment.

The Format Cells dialog box appears with the Alignment tab displayed.



Click an orientation marker.

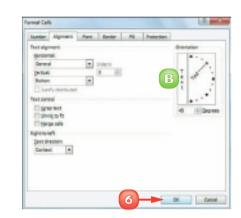
A You can also use the Degrees spin box to type or click a degree of rotation. (See the Tip on the following page.)

| Average Nigh 25 40 52 63 74 52 85 84 77 | | ц - К д- Д- | A B A | 3 | · Maren | ina Develo Altranal Formal alt as Table * Syles * Syles | 100 - 200 200 200 | bard + Dente + Pornal + Calls | 2 - 27 a | A |
|---|----------|----------------|--------------|---|---------|---|-------------------------|--|----------|----|
| Average Nigh 35 40 52 63 74 82 85 84 77 | Corage T | 6 emperato | C ares for I | that first also first (ga also first (gause | | | July | | | 10 |
| | | | | | 74 | | | | | |

| Text algoment | direntation |
|------------------|-------------|
| geroerak. | · · · · |
| General . Indent | 1. |
| pena 0 12 | |
| Balter # | |
| Lardy detributed | 1 |
| Text sprittel | |
| E tartertext | A + Elaure |
| Shink to fe | |
| El terran sala | |
| Careto with | |
| Sext descriers | |
| Carlani + | |
| | |
| | |
| | |
| | |

B You can click the vertical text area to display your text vertically instead of horizontally in the cell.





Excel rotates the cell text.

- C The row height automatically increases to contain the slanted text.
- You can reduce the column width to free up space and make your cells more presentable.



When you use the Degrees spin box to set the text orientation to a positive number, such as 25, Excel angles the text in an upward direction. If you set the text orientation to a negative number, such as -40, Excel angles the text in a downward direction. You can specify values in the range from 90 degrees to -90 degrees.

ADD A BACKGROUND COLOUR TO A RANGE

You can make a range stand out from the rest of the worksheet by applying a background colour to the range. For example, many people apply a background colour to the labels in a range, which makes it easier to differentiate the labels from the data.

Perhaps the easiest way to change the background colour is by applying a colour from the set of 60 predefined colours that come with the workbook's theme. You can also choose a colour from Excel's palette of standard colours or from a custom colour that you create yourself.

Select a Theme or Standard Colour

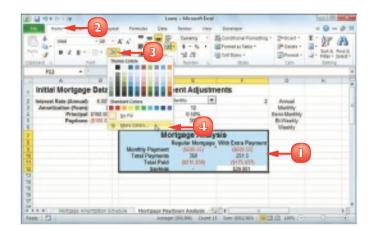
- Select the range you want to format.
- 2 Click the **Home** tab.
- 3 Click ⊡ in the **Fill Color** list (≧).
- 4 Click a theme colour or one of Excel's standard colours.
 - Excel applies the colour to the range text.
 - B To remove the background colour from the range, click No Fill.

| E G STREET | - | N | 008 | Gran Are | - Monat | field | | | 152 | 10 - 0 |
|------------------|------------------------|--------|------------|------------|------------------------------|--|--------|------------------------------------|-------|--------|
| the April - | - 2 | nut Pa | omulas D | es leste | e nev | Design | | | - 6 | 1-0: |
| | * 1 (1)* 8 * 1 (1)* | - 6.6 | -3 | 1 = 1 = 1 | - 10 - 10 - 10 - 10 | Conditional Premait as la Orif Bales - | etie - | Printer Print Printer Can | | r 🗚 |
| .41 | + (* | A 60P | -Armuel Gr | renth Rate | (Neuroer In | Rge,Visaehopla | 0,000 | | | |
| A 1. | | C | D | 1 | F | G I | H | 1 | 2 | 3 |
| GDP-Ar | nual Gr | owth P | tate (Se | ource: | http:/ | /swive | Lcom/ | 1 | - | |
| 1 | 1968 | 1000 | 2000 | 3004 | 2003 | 3008 | 2004 | 3005 | 2008 | _ |
| 3 Austria | 3.9% | 2.7% | 5.5% | 0.7% | 3.2% | 0.8% | 2.2% | 1.8% | 2.6% | 2.19 |
| d Belglam | 3.0% | 3.7% | 3.8% | 0.7% | 0.9% | 1.7% | 2.9% | 1.5% | 2.1N | 1.8% |
| 5 Camalla | 4.5% | 5.6% | 5.4% | 1.8% | 3.4% | 2.0% | 2.996 | 4.6% | 8.2% | 2.8% |
| 6. Donmark | 2.5% | 2.6% | 2.8% | 1.3% | 0.5% | 0.7% | 2.484 | 3.4% | 2.5% | 2.5% |
| T illulard | 5.0% | 3.4% | 5.1% | 1.7% | 3.2% | 2.4% | 3.7% | 3.3% | 3.7% | 3.8% |
| E Prance | 3.4% | 2.2% | 5.296 | 2.7% | 3.2% | 0.8% | 2.9% | 1.2% | 1.9% | 2.09 |
| 9 Germany | 2.0% | 2.0% | 4.5% | 1.2% | 0.2% | 0.8% | 1.6% | 1.2% | 1.9% | 1.5% |
| 10 dresse | 3.4% | 3.4% | 4.5% | 4.7% | 3.8% | 4.7% | 4.2% | 3.7% | 3.5% | 3.2% |
| 11 Hungary | 4.9% | 4.2% | 5.2% | 4.2% | 3.976 | 2.4% | 4.676 | 4.5% | 8.584 | 3.69 |
| 12 sookand | 5.6% | 4.2% | 5.4% | 2.6% | -2.1% | 4.2% | 5.2% | 5.8% | 3.0% | -0.8% |
| 13 Instand | 8.6% | 11.7% | 10.3% | 6.0% | 6.1% | 3.7% | 4.9% | 4.7% | 4.8% | 4.8% |
| 58 Haly | 1.8% | 1.7% | 3.0% | 1.8% | 0.4% | 0.8% | 5.2% | 0.7% | 5.2% | 1.2% |
| 25 Methaniands | 4.3% | 4.0% | 1.5% | 1.4% | 6.6% | -0.8% | 1.4% | 1.5% | 2.5% | 2.5% |
| 15 Norway | 2.8% | 2.7% | -2.8% | 2.7% | 1.1% | 0.4% | 2.9% | 2.5% | 2.2% | 3.5% |
| s s s s jabort / | Sheet2 / She | 10.10 | | | | D+1 | | | | 1 |
| feetr 2 | | | | | | | | 22 1094 (- | | (1) |

| C G de la la | | | | byut-fan | | | | | 100 | |
|--------------|---------------|-------------|------------|---|------------|-----------------------------|---------|--|--------|-------|
| the Party | Intert Pagel | apput Pa | results De | a lette | r riev | Doninger | | | 6 | a = a |
| | - 2 8-10-1 | · A' A' | | 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - | 5. 1 | Premait as 1 Ord Bales - | white | (Printer - Printer - Printer - Call | -R. 14 | |
| .81 | = (n. | | | Rate | Neuroer In | Ray/Ventral. | (mag | | | |
| al 8. | | - 64 | 11111 | a particular | 0 | 6 | | 1 | 2 | |
| GDP-Ar | | | 161 | CRC | 4 | /swive | L.com/) | 1 | (| A |
| 2 | 1998 | Shambard Co | ies . | 1005 | 20053 | 3008 | 2004 | 3005 | 2008 | |
| 3 Austria | | | | .7% | 1.2% | 0.8% | 2.2% | 1.8% | 2.6% | 2.57 |
| 2 Belgium | B | 5+14 | | .7% | 8.9% | 1.7% | 2.9% | 1.5% | 2.1N | 1.8 |
| 5 Canada | 1 | B Mart C | anara. | .8% | 3.4% | 2.0% | 2.996 | 4.6% | 8.2% | 2.8 |
| 6 Oenmark | 2.5% | 2.8% | 4.879 | 1.3% | 0.5% | 0.7% | 2.486 | 3.4% | 2.5% | 2.2 |
| T ifiniand | 5.0% | 3.4% | 5.2% | 1.7% | 3.2% | 2.4% | 3.7% | 3.3% | 3.7% | 3.8 |
| 8 Prance | 3.4% | 3.2% | 5.2% | 2.7% | 5.2% | 0.8% | 2.3% | 1.2% | 1.9% | 2.8 |
| 9 Germany | 2.0% | 2.0% | 4.5% | 1.2% | 6.2% | 0.8% | 1.6% | 1.2% | 1.9% | 1.5 |
| Greece C | 3.4% | 3.4N | 4.5% | 4.7% | 3.8% | 4.7% | 4.2% | 3.7% | 3.5% | 3.2 |
| 1 Hungary | 4.9% | 4.2% | 5.2% | 4.2% | 3.8% | 2.4% | 4.675 | 4.2% | 3.584 | 3.6 |
| 2 sootand | 5.6% | 4.2% | 5.4% | 2.6% | -2.1% | 4.2% | 5.2% | 5.8% | 3.0% | -0.8 |
| 3 ireland | 8.6% | 11.7% | 10.5% | 6.0% | 6.1% | 3.7% | 4.9% | 4.7% | 4.8% | 4.8 |
| of Huly | 1.8% | 1.7% | 1.0% | 1.8% | 0.4% | 0.2% | 5.2% | 0.7% | 5.2% | 1.2 |
| S methoda | 4.3% | 4.0% | 1.5% | 1.4% | 6.6% | -0.9% | 1.4% | 1.5% | 2.5% | 2.5 |
| 15 Romany | 3.4% | 2.2% | -2.8% | 2.7% | 3.1% | 0.4% | 2.9% | 2.5% | 2.2% | 3.5 |
| III Shoett / | Sheet2 . She | 10.10 | | | | E41 | | | | |
| lastr Cl | | | | | | | | 223 100% (- | | |

Select a Custom Colour

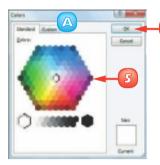
- Select the range you want to format.
- 2 Click the **Home** tab.
- 3 Click I in the Fill Color list (2).
- 4 Click More Colors.



The Colors dialog box appears.



You can also click the Custom tab and then either click the colour you want or enter the values for the Red, Green, and Blue components of the colour.



Click **OK**.

Excel applies the colour to the selected range.



CHAPTER 4 FORMATTING EXCEL RANGES

APPLY A NUMBER FORMAT

You can make your worksheet easier to read by applying a number format to your data. For example, if your worksheet includes monetary data, you can apply the Currency format to display each value with a pound sign and two decimal places.

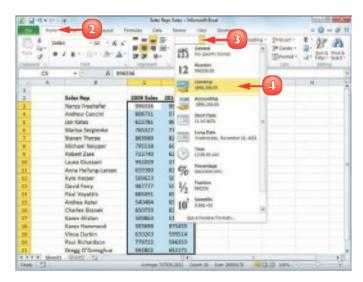
Excel offers ten number formats, most of which apply to numeric data. However, you can also apply the Date format to date data, the Time format to time data, and the Text format to text data.

Apply a Basic Format

Select the range you want to format.

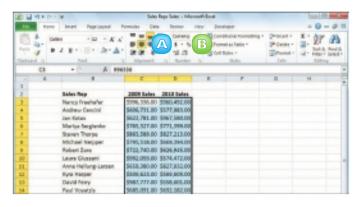
| | . A. | | 6 | Ð | 6 | F | Ģ | 11 | |
|---------|---------|---------------------|------------|----------------|--------------|--------------|---|-----|-----|
| 2 | | Sales Fep | 2009 Sales | 2010 Sales | | | | | |
| 3 | | Nancy Freehofer | 296336 | 968402 | | | | | |
| 4 | | Andrew Cencini | 806735 | \$77943 | | | | | |
| | | Jan Kalas | 632785 | 847580 | | | | | |
| 16 | | Mariya Sergienko | 765327 | 171109 | | | | | |
| 3 | | Steven Thorpe | 863589 | 827213 | | | | | |
| | | Michael Neigoer | 795518 | 668394 | | | | | |
| | | Robert Zare | 722748 | 626945 | - | | | | |
| 80 | | Launa Elucisani | 992058 | 874472 | | | | | |
| 11. | | Anne Hellung-Lensen | 890380 | 827962 | | | | | |
| 12 | | Ryra Harper | 509625 | 549409 | | | | | |
| 11.0 | | David Ferry | 862772 | 558601 | | | | | |
| 24 | | Reul Veyetals | 685095 | 692183 | | | | | |
| 10 | | Andrea Aster | 540454 | 683782 | | | | | |
| 96 | | Charles-Granak | 650755 | 823034 | | | | | |
| 27 | | Karen Allston | 509863 | 5812569 | | | | | |
| 100 | | Karen Hammond | 500698 | 975455 | | | | | |
| 100 | | Minor Durble | 630263 | 1999124 | | | | | |
| 20 | | Paul Richardson | 779722 | 996353 | | | | | |
| 21. | | Grapp O'Donoghua | 592802 | 652171 | | | | | |
| 1111 | there a | 1/8-0.70/ | | | | | | | 10 |
| Ready 2 | 53 | | .iseps | ope 10%84.3652 | County (M.) | lum 28881418 | | s 2 | - 6 |

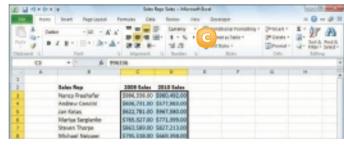
- 2 Click the **Home** tab.
- 3) Click the Number Format 🗹.
- Click the number format you want to use.



Excel applies the number format to the selected range.

- For monetary values, you can click Accounting Number Format (5).
- For percentages, you can click Percent Style (%).
 - G For large numbers, you can click **Comma Style** (...).





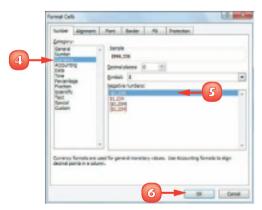
Use the Format Cells Dialog Box

- Select the range you want to format.
- 2 Click the **Home** tab.
- 3 Click the Number group's dialog box launcher (🗐).

The Format Cells dialog box appears with the Number tab displayed.

- In the Category list, click the type of number format you want to apply.
- 5 Use the controls that Excel displays to customise the number format.
- 👩 Click **OK**.

Excel applies the number format.



APPLY AN AUTOFORMAT TO A RANGE

You can save time when formatting your Excel worksheets by using the AutoFormat feature. This feature offers a number of predefined formatting options that you can apply to a range all at once. The formatting options include the number format, font, cell alignment, borders, patterns, row height, and column width.

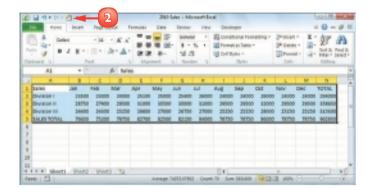
The AutoFormats are designed for data in a tabular format, particularly where you have headings in the top row and left column, numeric data in the rest of the cells, and a bottom row that shows the totals for each column.

Select the range you want to format.

| | | | - C - | Ð | | - F | - a - | | | | - K. | - L - | M | N | |
|---|--------------|-------|--------|-------|-------|---------|----------|--------|---------|-------------------|--------|---------|-------|---------|---|
| | Sales. | Jan . | Peb | Mar | Apr | Mag | Jun . | .bjil | Arg. | 549 | Q.R. | Teles . | 044 | TOPAL | L |
| | Division I | 20580 | 20800 | 24000 | 25300 | 25000 | 25400 | 25080 | 24000 | 24000 | 26000 | 34000 | 24000 | 294007 | 1 |
| | Bryislen II | 29756 | 27966 | 28900 | 31000 | 30500 | 30000 | 56,998 | 25566 | 28900 | 33000 | 29500 | 19586 | | |
| | Division III | 29400 | 24300 | 25250 | 30000 | 19000 | 36750 | 27000 | 15,290 | 25,250 | 38000 | 25650 | 15058 | 30,8300 | Г |
| | SAULS TOTAL | 79600 | 75,200 | 76750 | 81700 | \$2500 | 82158 | \$4000 | 78,550 | 76150 | 86000 | 19750 | 19754 | 162830 | Ľ |
| 1 | | | | - | _ | | | | _ | | | | _ | | 1 |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| ï | A PL Mark | 1/104 | 0.794 | 10/11 | 1 | | | | EAD | - | | | | | 1 |
| | 0 53 | | | | | ence he | ALC: NO. | 10.00 | in them | Mark and American | 100.00 | I state | - | | |

2 Click AutoFormat (🔄).

Note: See Chapter 1 to learn how to add a button to the Quick Access Toolbar. In this case, you must add the QuickFormat button.



The AutoFormat dialog box appears.

- In the Table format list, click the AutoFormat you want to use.
- Click OK.

Excel applies the AutoFormat to the selected range.

| | A | 8 | Ę. | 0 | Ε. | | - 6 | | | | ×, | 1 | M | N | 0 | P | - G |
|----|-------------|-------|-------|-------|---------|--------|-------|--------|-------|--------|--------|-------|-------|--------|---|---|-----|
| 5 | Selec | . 64 | - 748 | 144 | Arr | ster | 100 | - 14 | Aug | Sep | det | Mov | dec | FORML. | | | |
| 2 | Division I | 21100 | 23000 | 24000 | chant | 21000 | 21400 | 36000 | 34000 | 24000 | 24000 | 26000 | 34000 | 294000 | | | |
| 1 | Division # | 34790 | 37900 | 29900 | \$4,000 | 305600 | 80000 | 83000 | 28900 | 299000 | \$2000 | 29900 | 38800 | 338600 | | | |
| ĩ | Bryblen M | 34400 | 34800 | 25360 | 28800 | 27988 | 36258 | 3 1000 | 25250 | 25/390 | 26060 | 25258 | 31250 | 310588 | | | |
| 5 | SAUES TOTAL | 76650 | 75300 | 78750 | 82700 | 80500 | 62150 | 84000 | 76750 | 78730 | \$6000 | 78758 | 18750 | 962958 | | | |
| ŝ, | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |
| ï | | | | | | | | | | | | | | | | | |
| ï | | | | | | | | | | | | | | | | | |
| ï | | | | | | | | | | | | | | | | | |

Excel enables you to control the six formats that are part of each AutoFormat: number, font, alignment, border, patterns, and width/height. In the AutoFormat dialog box, click Options and display the Formats to apply group. Deselect the option for each format you do not want to apply (I changes to)) and then click OK.

To revert to a plain, unformatted state, select the range and then click into the display the AutoFormat dialog box. In the format list, click None, and then click OK. Excel removes the AutoFormat from the selected range.

APPLY A CONDITIONAL FORMAT TO A RANGE

You can make a worksheet easier to analyse by applying a *conditional format* to a range. A conditional format is formatting that Excel applies only to cells that meet the condition you specify. For example, you can tell Excel to apply the formatting only if a cell's value is greater than some specified amount.

When you set up your conditional format, you can specify the font, border, and background pattern, which helps to ensure that the cells that meet your criteria stand out from the other cells in the range.

- Select the range you want to work with.
- 2 Click the **Home** tab.
- Click Conditional Formatting.
- Click Highlight Cells Rules.
- Click the operator you want to use for your condition.

An operator dialog box appears, such as the Greater Than dialog box shown here.

- Type the value you want to use for your condition.
 - You can also click the collapse dialog box button (Ims) and then click in a worksheet cell. Depending on the operator, you may need to specify two values.
 - Click this 🖸 and then click the formatting you want to use.



To create your own format, click **Custom Format**.

| * | 100 | - 2 | and to | make the | ra forier | a view | beenper | | | - 6 | 6 |
|---|-------------------|---------------------------------------|---------|----------|-----------|-----------|-------------|--|------------------------|------------------|------|
| | 6 0000 | 1.14 | - 8.6 | | ill here | stage - 1 | C Intellige | formation and | - | | 3 |
| | | Sel De | an Ar | | (4) | 2.5 | | of Calls Party | . 14 | Grader Inco. | - |
| 1 | | And | _ | | | a | -81 | | | | b. |
| | 80 | *1- | .6 3.92 | | 3, 154 | | H. Darite | tion Bales | · 14 | Line marks | |
| | | _ | 11 2.00 | D | | | - | | | | |
| | A | | e 1 | - | | | El prote | | 14 | | |
| | GDP-An | inual Gr | owth P | tate (So | purce; l | http:/ | and a | | _ | 5 | |
| | | 1000 | 1000 | 2990 | 1905 | 2012 | 3 cau 5 | and the second sec | - 14 | | |
| | lambria | 1.85 | 3.7% | 8.8% | 4.7% | 1.7% | | | | | |
| | Belgium | 1.0% | 3.2% | 3.9% | 4,7% | 0.9% | El mon | | 1 100 | (int that Lord | ÷ |
| | Earnada | 4.15 | 5.6% | 5.4% | 1.6% | 5.4% | TT STOR | - | - 48 | - | |
| | Dorwork | 1.1% | 2.4% | 2.9% | 2.7% | 0.9% | S Spellar | | | | |
| | Finland | 8.0% | 8.0% | 6.1% | 1.7% | 2.3% | S Desthis | | | Const Street | - |
| | Enancia I | 3.4% | 3.2% | 5.3% | 2.7% | 1.2% | in thrappy | | 100 | | |
| | Gennary | 1.0% | 2.0% | 4.55 | 3.7% | 0.24 | | | 100 | Overlauter Value | m |
| | B-mouth | 2.405 | 2.4% | 4.2% | 4.7% | 2.6% | 4,7% | 429 | | and an | |
| | specifier's | 4.9% | 4.2% | 5.2% | 4.1% | 3.8% | 1.4% | 4.875 | | | |
| | heland | 1.4% | 4.2% | 5.4% | 2.6% | 2.1% | 1.7% | 8.2% | 1.8% | 1.8% | 648 |
| | iteland | 8.5% | 11.5% | 18.5% | 8.0% | 8.7% | 5,7% | 4.5% | 476 | 4.5% | 4.68 |
| | | 1.0% | 1.7% | 3.0% | 1.0% | 2.4% | 9.2% | 1.2% | 0.1% | 1.1% | 123 |
| 1 | | 4.1% | 4.0% | 3.8% | 2.7% | 0.6% | -0.8% | 2.8% | 1.5% | 1.5% | 2.13 |
| | Indunti | 4.8% | | 4.0% | | 144 | | | 5.4% | | |
| | | | 4.1% | | 1.0% | 0.4% | 5.8% | 5.4% | | 5.0% | 5.15 |
| | Pertapat | 4.5% | 2.0% | 2,4% | 5.78 | 5.75 | -1.0% | 8.2% | 0.4% | 1.0% | 140 |
| | Secola I | -1.35 | 6.4% | 10.0% | 5.78 | 4.7% | 7.3% | 2.25 | 6.0% | 4.05 | 1.25 |
| | April 1 | 4.00 | 4.2% | 2.7% | 1.05. | 2.76 | 2.8% | 3.55 | 1.04 | 1.25 | 2.08 |
| | turaden | 3.65 | 4.6% | 435 | 1.0% | 2.0% | 1.5% | 3.8% | 2.7% | 3.85 | 2.85 |
| | Peridon | 1.85 | 1.2% | 3.6% | 10% | 0.2% | -0.4% | 2.2% | 1.8% | 1.8% | 10 |
| | an individual and | 1.15 | 2.05 | 1.7% | 2.7% | 1.8% | 2,2% | 2.2% | 1.0% | 1.40 | 2.05 |
| | United States | 4.2% | 3.06 | 4.7% | 1.35 | 1.01 | 2.76 | 4.2% | 1.01 | 1.05 | 8.25 |
| | | Road / Pre | | 1.15 | 1.15 | | 1141 | 4.0 | 2.05 | 1.05 | 4.0 |
| | 0.153 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 14 A | | manage 2 | Dia Date | | | | | _ |



8

| format cells that are | GREATER THAR | |
|-----------------------|--------------|------------------------------|
| 10% | × +0 | upt for PL vit-Data Red Text |
| | | |

Excel applies the formatting to cells that meet your condition.

| | 8 | | 0 | - E | 1 | G | 8 | 1 | 1 | π. |
|-------------------|--------------|-------|---------|--------|----------|--------|-------|---------|------|-------|
| 1 GDP-Ar | nual Gr | owth | Rate (S | Source | : http:/ | /swive | Lcom/ |) | | |
| 2 | 1,008 | 1999 | 2000 | 2003 | 2002 | 3005 | 2004 | 2005 | 3006 | 2990 |
| 1 Austria | 3.2% | 2.7% | 1.7% | 0.7% | 1.2% | 0.0% | 3.7% | 1.3% | 2.6% | 2.18 |
| 4 Melgium | 2.0% | 0.2% | 3.9% | 0.7% | 0.9% | 2.0% | 2.9% | 1.5% | 2.1% | 1.09 |
| Canada | 4.1N | 5.0% | 5.4% | LIN | 3-456 | 2.0% | 3.9% | 4.8% | 5.7% | 2.45 |
| 6 Denmark | 2.5% | 2.6% | 3.8% | 1.5% | 0.3% | 0.7% | 2.4% | 3.8% | 2.1% | 3.18 |
| 7 Hinland | 3.0% | 2.4% | 3.1% | 1.1% | 2.2% | 2.4% | 3.7% | 3.2% | 2.7% | 2.05 |
| I. Avence | 3-4% | 5.2% | 5.7% | 2.1N | 1.2% | 0.8% | 3.8% | 1.2% | 1.9% | 3.05 |
| 2 Germany | 2.0% | 2.0% | 4.2% | 1.2% | 0.2% | 0.0% | 1.0% | 1.2% | 2.8% | 1.15 |
| O rármece | 3.4% | 2.4% | 4.5% | 4.3% | 3.8% | 4,7% | 4.2% | 3.7% | 3.5% | 3.25 |
| 1 Hungary | 4.9% | 4.7% | 5.2% | 4.5% | 5-8N | 5.4% | 4.6% | 4.1N | 3.5% | 3.65 |
| 12 soebed | 3.8% | 4.2% | 3.4% | 2.8% | -2.1% | 4.2% | 3.7% | 3.8% | 3.8% | -0.68 |
| 5 Indand | 0.5% | 11.3% | 36.2% | 6.8% | - 16.1% | 5.7% | 4.9% | 4.7% | 4.8% | 4.65 |
| d Huly | 1.8% | 1.7% | 3.0% | 1.8% | Q.IN | 0.3% | 3.2% | 0.1N | 1.2% | 1.29 |
| 5 Netherlands | 4.8% | 4.0% | 1.5% | 1.4% | 0.8% | -0.8% | 14% | 1.5% | 2.5% | 2.15 |
| 6 Nonway | 2.8% | 2.0% | -2.4% | 2.7% | 1.1% | 0.4% | 2.9% | 2.5% | 2.2% | 3.13 |
| T Peland | 4.8% | 4.3% | 4.0% | 1.0% | 3.4% | 1.8% | 3.4% | 8.4% | 8.0% | 8.15 |
| () Portugal | 4.8% | 3.0% | 3.4% | 1.9% | d-ahi | -0.2% | 1.0% | 0.4% | 1.6% | 1.45 |
| Semania | -4.8% | -1.2% | 6.6% | 5.7% | 3.15 | 5.25 | 4.75 | 4.15 | 6.2% | 6.45 |
| 10 Manufa | 18.3% | 1.0% | 36.0% | 3.1% | 4.7% | 7.3% | 3.1% | 0.4% | 8.0% | 3.25 |
| 1 Spale | 4.0% | 4.2% | 3.2% | 9.5% | 2.2% | 2.8% | 1.1% | 3.4% | 1.2% | 2.99 |
| 12 Sweden | 3-8% | 4.6% | 4.8% | 1.3% | 2.0% | 1.5% | 3.6% | 2.7% | 3.6% | 2.45 |
| 11 Pullanlard | 2.8% | 1.7% | 1.6% | 1.0% | 0.3% | 10.4% | 2.7% | 3.8% | 2.0% | 1.79 |
| United Hingdom | 2.2% | 2.8% | 3.7% | 2.0% | 1.0% | 2.2% | 3.1% | 1.0% | 2.6% | 2.09 |
| 71. United States | 4-2% | 5.8% | 4.2% | 0.8% | 1.6% | 2.7% | 4.2% | 3.5% | 3.5% | 3.25 |
| + + + Shoet1 | Sheet2 / She | 12 10 | | | | 24 | | | | F |
| NAME: 1 | | | | | | | 100 | 1001.05 | | |

 \checkmark

Excel enables you to specify multiple conditional formats. For example, you could set up one condition for cells that are greater than some value and a separate condition for cells that are less than some other value. You can apply a unique format to each condition.



If you no longer require a conditional format, you can delete it. Follow Steps I to 3 to select the range and display the Conditional Formatting menu, and then click Manage Rules. Click the conditional format you want to remove and then click Delete Rule.

APPLY A STYLE TO A RANGE

You can reduce the time it takes to format your worksheets by applying Excel's predefined styles to your ranges. Excel comes with more than 20 predefined styles for different worksheet elements, such as headings, as well as two dozen styles associated with the current document theme.

Each style includes the number format, cell alignment, font typeface and size, border and fill colour.

- Select the range you want to \square format.

 - Click the **Home** tab.
- Click Cell Styles.



ease Mildlight Court

24000 25400 25000 25400 29500 14000 30500 30000

Excel displays the Cell Styles gallery.



Click the style you want to apply.

Note: If the style is not exactly the way you want, you can right-click the style, click **Modify**, and then click **Format** to customise the style.

Excel applies the style to the range.

| 1 | 10100 | 1. | | | 2010 Sales + 1 | Microsoft Eccel | | | 102-05-5 |
|---------------------|----------------------------------|----------------------------------|------------------------------|--|--------------------------------|-----------------|---|--------------|----------|
| - The | Acres | humi | Page 14 | and Armite | Data Rata | a ties for | dige. | | |
| 1000 | 4 DB | 1.1 | 11.1 | · X X 3· Δ· | 8.81 58 | · · · · · | attonerfoniating matas Table - Signet 1 | 2ª Cater - | |
| _ | AS | | | received. | | Good | Neutral | | |
| 1 54 | | | | Calculation | Deck Cell | Exploretory | Imput | United Cell | Note |
| 3 00 | raise I raise II raise III | 23500 24750 34400 76640 | 2100 2790 3430 7550 | durput Title and Heating Heading 1 | | Heading 3 | Bearing 4 | 4 | Total |
| 8 7 8 | | | | | 20% - Accent2 40% - Accent2 | | | | |
| 8 | | | | Are Access | Street Access? | HER - HELE E | ACTS - ACCART | HUN-HELEND | |
| 13 18 | | | | Names Format Comma | Comme (d) | Currently | Currency (d) | Percent | Accesta |
| 58 | | | | Lange Spice | | | Care of the | | |
| 17 1 4 5 2000 | * Sheet1 | Start2 | . Dan | 0.92 | Annue 24141 | | | (-) etc. [5] | - 11 |

| | A | - 1- | 6 | | 5 | - P | - 6 | | | | | | M. | M | - / |
|------------|--------------|----------|--------|-------|--------|-------|-------|-------|--------|-------|--------|--------|-------|---------|-----|
| 1 | Sales | lan i | Feb | Mar | Apr | May | Jun . | Jul - | Aug | Sep | 0et | New | Bec . | TOTAL | |
| 2 | Division i | 2880 | 2000 | 2400 | 25,000 | 25800 | 25400 | 26000 | 24000 | 24000 | 26000 | 24000 | 24000 | 294000 | |
| 3 | Divisien il | 26750 | 27968 | 25500 | 20,000 | 26500 | 20000 | 20000 | 20000 | 26900 | 3,3000 | 28900 | 28900 | 259490 | |
| 4 | Division III | 24400 | 24000 | 25356 | 20000 | 27000 | 26790 | 27000 | 25,250 | 25250 | 28000 | 20250 | 20250 | Sursoo. | |
| 2 | SAUES TOTAL | 76458 | 75208 | 79750 | 42708 | 42508 | 42150 | 84008 | 78750 | 78750 | 86000 | 76750 | 76750 | 942950 | |
| | | | | | | _ | | | | | | | | _ | |
| T | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 11 | | _ | _ | _ | | | | | _ | | | | | | |
| - | I E Sheett | 2 SP4451 | 2.9948 | 17247 | | _ | | | 14 | - | - | | ~ | - | 1 |
| Fer | m 🛄 | | | | | | | | | | - 33 | 1. 10% | 0 | | -80 |

Excel comes with a gallery of table styles that offer formatting options that highlight the first row, apply different formats to alternating rows, and so on. Select the range that includes your data, click the Home tab, and then click Format as Table. In the gallery that appears, click the table format you want to apply. If you find yourself applying the same set of formatting options over and over, you can save the options as a custom style. Apply your formatting to a cell or range and then select that cell or range. Click Home, click Cell Styles, and then click New Cell Style. In the Style dialog box, type a name for your style and click OK.

CHANGE THE COLUMN WIDTH

You can make a column of data easier to read by adjusting the column width. For example, if you have a large number or a long line of text in a cell, Excel may display only part of the cell value. To avoid this, you can increase the width of the column. Similarly, if a column only contains a few characters in each cell, you can decrease the width to fit more columns on the screen.

Change the Width of One Column

Click in any cell in the column you want to resize.

| A. | 9 C | Ð | 1 | F | 6 | 14 | |
|-------------|-----------------------|-----------------|-----|---|--------------|----|------|
| 20 | Sales Rap 2009 Se | ales 3030 Sales | | | | | - 1 |
| | Mancy Freich, \$996,3 | | | | | | _ |
| | Andrew-Cenc \$606,7 | | | | | | _ |
| 5 | Jan Kotan 5622.7 | | | | | | |
| | Mariya Sergi- \$765.3 | 37 \$771,899 | | | | | _ |
| 2 | Steven Thorp \$963,5 | 89 5827,213 | | | | | |
| 0 | Michael Neis: \$795.5 | 38 5689,394 | | | | | |
| 9 | Robert Zore \$732,7 | 40 \$626,845 | | | | | |
| 3.0 | Laura Glussa \$992.0 | 59 5574,472 | | | | | |
| 11 | Anne Hellung 5650.5 | 60 5627,552 | | | | | |
| 12 | Kyse Harper \$508,6 | 23 5149,609 | | | | | |
| 13 | David Ferry \$987,7 | 77 \$558,601 | | | | | |
| 3.4 | Peul Veyetzia \$685.0 | 94 5682.182 | | | | | |
| 15 | Andrea Aster \$540,4 | 84 5683,762 | | | | | |
| 16 | Charles Gran \$650,7 | 18 5823,004 | | | | | |
| 17 | Karen Allutor \$509.8 | 63 \$551,569 | | | | | |
| 3.8 | Karen Hammi \$500.0 | 89 5975,455 | | | | | |
| 38 | Vince Durbin \$630,2 | \$3 \$199,554 | | | | | |
| 28 | Peul Richards \$779,7 | 22 \$196,353 | | | | | |
| 25 | Gregg O'Don \$592.8 | 62 5652.171 | | | | | |
| 22 | 1./9442./52/ | | | | | | |
| Total Sheet | 0.724827527 | | 341 | | A D D HIS CO | _ | - 10 |
| Rody 🛅 | | | | | | | -a. |

- 2 Click the **Home** tab.
- 3 Click Format.
- Click Column Width.

| 10 16 | 10 × 0× 10 | | | Salas Raps Salas | - Moreath Boa | 1 | 100 | 0000 |
|--------------|------------|-------------|------------|---|---------------|----------|---|--------|
| 184 | | -2 | April Fam | nulas Data | Bolev Ve | v Downer | + 6 | - # # |
| 144 | 1 11- 4 | | | D General 981- 8 - 5 54 /3 54 /3 | · · (1000) | | Print - X - A Print - B - Z Print - 2 - R | A Dest |
| | 0.5 | • (* | .6 Nexty | Freehafer | | | 10 Reutgeget | - |
| - | 4 | | c | D | e . | - | Subdition head | < 18 |
| 1 | | | | | | 4 | Column gooth | N 6 |
| 2 | 3al | es Rep | 2009 Sales | 2010 Sales | | | AutoRy Column IV | |
| 3 | | cy Freeha | \$996,336 | 9960,492 | | | prive were. | |
| -4 | And | irevi Cenci | \$686,731 | \$577,983 | | | VADATA | |
| 5 | Jan | Ketes | \$622.781 | \$967,580 | | | Pice & genue | |
| -5 | Ma | rise Sergie | \$785,827 | \$771,399 | | | Organics Sharts | - 11 |
| 7 | \$0e | en Thorpi | \$868,589 | \$827,218 | | | Benane Deat | |
| | Mix | hael Nelpy | \$795,558 | \$669,394 | | | | |
| | Rol | out Zano | \$722,740 | \$636,945 | | | Mane or Copp Stee | |
| 10 | Lev | re Gusser | 5992.059 | \$574,472 | | | Die Onles | |
| 11 | hee | e Hellung | \$659,380 | \$827,982 | | | Partaction | 11 |
| 12 | Kar | Harper | \$509.623 | \$549,409 | | | an Detert Dert. | |
| 13 | Oer | id Ferry | \$947,777 | \$558,605 | | | Los Cel | |
| 14 | | Voustala | 5685.091 | 5652,182 | | | # Fenzigh. | |
| 15 | And | irea Aster | \$540,484 | \$689,762 | | | | |

The Column Width dialog box appears.

- In the Column width text box, type the width you want to use.
- 🙆 Click **OK**.

Excel adjusts the column width.

You can also move ♀ over the right edge of the column heading (♀ changes to +) and then click and drag the edge to set the width.

Change the Width of All Columns

- 2 Follow the steps in this section to set the width you prefer.
- If you have already adjusted some column widths and you want to change all the other widths, click **Home**, click **Format**, and then click **Default Width** to open the Standard Width dialog box.
- Type the new standard column width, and then click OK.

 \square

Excel's AutoFit feature automatically adjusts the column width to fit the widest item in a column. Click any cell in the column, click Home, click Format, and then click AutoFit Column Width.

| Edurery | 1001 30 | - | - 5 | Ð |
|---------|---------|-------|-----|---|
| 6 | | Canal | | |

| A | 8 | + c | 0 | 10 | 0 | H | -, |
|-----------|---------------------|-------------|------------|------------|---|----------|----|
| 2 | Seles Rep | A 109 Sales | 2010 Sales | | | | ſ |
| 3 | Nancy Freehafer | 5994,334 | \$960,492 | | | | 1 |
| 4 | Andrew Cencini | \$606,735 | \$577,963 | | | | 1 |
| 5 | Jan Kotas | \$622,760 | \$967,580 | | | | 1 |
| 5 | Mariya Sergienko | \$768, 827 | \$771,389 | | | | |
| 7 | Steven Thope | \$863,589 | \$837,218 | | | | |
| | Michael Neipper | \$795,518 | \$669,394 | | | | |
| 9 | Robert Zere | \$722,748 | \$626,945 | | | | |
| 8 | Leura Glussani | \$992,059 | \$574,472 | | | | |
| 2 | Anne Hellung-carsen | \$658,380 | \$837,982 | | | | |
| 2 | Kyta Harper | \$508,623 | \$569,689 | | | | |
| 3 | David Ferry | \$887,777 | \$558,601 | | | | |
| 4 | Raul Veyatals | \$485,095 | \$692,182 | | | | |
| 5 | Andrea Aster | \$540,484 | \$693,762 | | | | |
| 5 | Charles Granek | \$450,733 | \$823.034 | | | | |
| 7 | Karen Aliston | \$509.863 | \$511,549 | | | | |
| 8 | Karen Hammond | \$503,699 | \$975,455 | | | | |
| * | Vince Durbin | \$638,263 | \$599,534 | | | | |
| 9 | Paul Richardson | \$779,722 | \$596,353 | | | | |
| 19 | Gregg O'Danaghue | \$592,802 | \$652,171 | | | | |
| 1 0 0 She | t1/9+at2/52/ | | 84 | | | | d |
| Insty 23 | | | | 10 13 140A | 0 | <u> </u> | |

CHANGE THE ROW HEIGHT

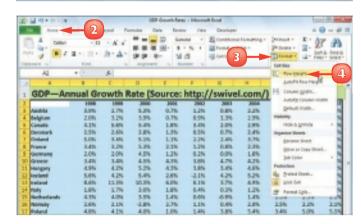
You can make your worksheet more visually appealing by increasing the row heights to create more space. This is particularly useful in worksheets that are crowded with text. By increasing the row heights, you add white space above each cell, which makes the text easier to read.

If you want to change the row height to display multiline text within a cell, you must also turn on text wrapping within the cell. See "Wrap Text Within a Cell" later in this chapter.

Select a range that includes at least one cell in every row you want to resize.

| 100 | A | 8 | c | 0 | 1 | - F | 6 | H | 1 | 1 | K | 1 |
|------|-------------------------------|----------------|----------|----------|-------------|----------|----------|--------|----------|------|----------|---|
| 1 | GDP-Ar | nual Gro | owth | Rate (So | ource: | http:// | /swive | l.com/ |) | | | 1 |
| 2 | | 2998 | 2000 | 3000 | 3004 | 3000 | 2005 | 2994 | 2005 | 2006 | 3067 | |
| 3 | Antria | 2.9% | 2.7% | 5.1% | 6.7% | 1.2% | 0.0% | 2.2% | 1.0% | 2.6% | 2.5% | |
| 4 | Reighum | 2.8% | 5.7% | 3.9% | 6.7% | 6.9% | 1.3% | 2.9% | 1.5% | 2.1% | LIN | |
| 5 | Canoda | 4.2% | 5.8% | 3.4% | 1.8% | 1.4% | 2.0% | 2.2% | 4.8% | 1.2% | 2.8% | |
| 1. | Ownmark | 2.5% | 2.6% | 2.8% | 5.75 | 8.5% | 6.7% | 2.4% | 3.4% | 2.5% | 2.1% | |
| 3 | Findand | 5.0% | 3.4% | 8.7% | 1.7% | 3.2% | 2.4% | 3.7% | 3.3% | 3.7% | 2.8% | |
| | PERSONAL PROPERTY AND INCOME. | 2.4% | 2.2% | 5.8% | 2.1% | 1.2% | 10.0% | 2.0% | 1.2% | 1.9% | 2.8% | |
| | Germany | 2.8% | 2.8% | 4.9% | 1.7% | 6.2% | 6.0% | 1.6% | 1.2% | 1.8% | 1.1% | |
| 50 | Greece | 1.4% | 1.05 | 4.7% | 4.2% | 1.25 | 4.2% | 4.2% | 3.2% | 8.5% | 1.25 | 4 |
| 11 | intergraph (| 4.9% | 4.7% | 5.7% | 4.7% | 3.0% | 3.4% | 4.6% | 415 | 3.8% | 24 1 | A |
| 22 | Interiord | 3.8% | 4.2% | 3.4% | 2.0% | -1.15 | 4.2% | 3.2% | 3.8% | 1.0% | -2.4 | |
| 25 | waland | 0.0% | 10.3% | 18.2% | 6.6% | 6.2% | 3.2% | 4.9% | 4.05 | 4.2% | 4.674 | 7 |
| 54. | Histor | 1.8% | 2.7% | 8.0% | 1.8% | 6.4% | 0.8% | 1.2% | 0.1% | 1.2% | 1.3% | |
| | Northoniands | 4.3% | 4.0% | 8.5% | 14% | 245 | -0.9% | 1.4% | 1.5% | 2.5% | 2.5% | |
| 26 | Normay | 2.476 | 2.7% | -3.8% | 3.7% | 1.1% | 0.4% | 2.9% | 2.5% | 2.2% | 2.174 | |
| 27 | Poland | 4.8% | 4.2% | 4.0% | 1.0% | 1.4% | 3.2% | 3.4% | 3.4% | 3.2% | 3.1% | |
| 144 | Fortugal | 4.8% | 3.8% | 3.4% | 1.7% | 6.4% | -1.1% | 1.0% | 0.4% | 1.8% | 1.4% | |
| 29 | Romanda | -6.2% | 0.75 | 0.4% | 3.7% | 0.7% | 3.2% | 8.2% | 4.2% | 0.2% | 4.4% | |
| 20 | Austia | -5.3% | 6.4% | 28.6% | 5.1% | 4.7% | 3.2% | Tabi | 6.4% | 6.0% | 5.2% | |
| 21 | Spale . | 4.9% | 4.7% | 2.7% | 1.7% | 3.7% | 3.9% | 3.1% | 3.4% | 3.2% | 2.9% | |
| 21 | inveden | 1.05 | 4.0% | 4.1% | 1.0% | 1.0% | 1.5% | 1.0% | 2.7% | 1.1% | 2.8% | |
| 31. | indicer land | 2.8% | 1.794 | 1.01 | 1.0% | 6.1% | | 7.1% | 1.8% | 5.8% | 1.7% | 4 |
| 10.0 | | 394403 / Miles | en /ti / | | | | 14 | | | | - •0 | 4 |
| Rea | 4 53 | | | Aurope | 18-2019/074 | Grunt 20 | 3vn 2014 | 10413 | and they | 0.0 | | |

- 2 Click the **Home** tab.
- Click Format.
- 4 Click Row Height.



The Row Height dialog box appears.

In the Row height text box, type the height you want to use.



Excel adjusts the row heights.

You can also move bottom edge of a row heading (changes to the height.



| 1 | GDP-A | nnual d | rowth | Rate (S | ources | http:// | Inuive | Lcom/ | 1 | | - |
|-----|----------------|----------|------------|---------|--------|---------|--------|-------|----------|------|-------|
| - | | 200 | | 3000 | 3001 | 1002 | 2000 | 2004 | 2005 | 200 | 2007 |
| 7 | (\mathbf{A}) | 2.3% | | 5.1% | 6.75 | 1.2% | 0.0% | 2.2% | 1.0% | 2.6% | 2.1% |
| ā. | Belgium | 2.8% | | 1.9% | 6.75 | 6.95 | 1.0% | 2.95 | 1.5% | 2.1% | 1.8% |
| | Canada | 4.0% | | 5.4% | 1.65 | 1.4% | 2.0% | 2.9% | 4.8% | 9.2% | 2.8% |
| 6 | Denmark | 2.5% | 2.6% | 2.8% | 1.8% | 6.5% | 0.7% | 2.4% | 1.4% | 2.5% | 2.1% |
| 2 | rinked | 3.0% | 1.4% | 8.75 | 1.1% | 3.2% | 2.4% | 1.7% | 3.2% | 1.7% | 2.8% |
| 1 | PUBMIN . | 2.65 | 1.2% | 3.3% | 2.1% | 1.2% | o shi | 2.2% | 1.2% | 1.8% | 2.0% |
| ٤. | Germany | 2.0% | 2.0% | 4.3% | 1.2% | 0.2% | 0.0% | 1.4% | 1.2% | 1.8% | 1.1% |
| 50 | Greece | 1.6% | 3.6% | 4.1% | 4.1% | 1.0% | 4.7% | 4.2% | 1.7% | 5.5% | 1.2% |
| 51 | Hargary | 4.3% | 4.2% | 3.2% | 4.1% | 3.8% | 3.4h | 4.4% | 4.1% | 3.3% | 5.8% |
| 11 | hostand | 3.8% | 4.3% | 3.4% | 2.4% | 4.1% | 4.2% | 8-2hi | 3.8% | 5.8% | -0.4% |
| 13 | Ireland | 1.0% | 15.3% | 18.7% | 6.0% | 6.2% | 3.7% | 4.9% | 4.7% | 4.8% | 4.8% |
| 14 | maky | 1.01 | 1.76 | 3.0% | 1.8% | 6.4% | 0.3% | 1.2% | 0.1N | 1.2% | 1.2% |
| 12. | Netherlands | 43% | 4.64 | 3.8% | 145 | 6.6% | -0.9% | 1.4% | 1.5% | 2.5% | 2.0% |
| 16 | Hermay | 2.8% | 2.3% | -2.8% | 3.7% | 1.1% | 0.4% | 2.9% | 2.5% | 2.2% | 2.0% |
| 1.F | Enland | 4.8% | 4.75 | 4.0% | 3.0% | 3.4% | 1.6% | 5.4% | 3.4% | 5.0% | 5.05 |
| 18. | Fortupal | 4.6% | 2.8% | 2.4% | 1.7% | 645 | -1.15 | 1.0% | 0.4% | LIN | 1.4% |
| 1.1 | A N Marell | /9940.73 | nets / tg) | | | | 14 | | a la ses | G | |

 $\overline{\checkmark}$

You can use Excel's AutoFit feature to automatically adjust the row height to fit the tallest item in a row. Click in any cell in the row, click Home, click Format and click AutoFit Row Height. Alternatively, move over the bottom edge of the row heading (changes to +) and then double-click.

To change all the row heights at once, click \square (or press \square + \triangle) to select the entire worksheet. You can then follow the steps in this section to set the height by hand or move \bigcirc over the bottom edge of any row heading (\bigcirc changes to +) and then click and drag the edge.

WRAP TEXT WITHIN A CELL

You can make a long cell entry easier to read by wrapping the text within the cell. If you type more text in a cell than can fit horizontally, Excel displays the text over the next cell, if that cell is empty, or displays only part of the text if the next cell contains data. To prevent Excel from showing truncated cell data, you can format the cell to wrap the text within the cell. In most cases, Excel increases the row height just enough so that it can display all the text given the cell's current width.

Select the cell that you want to format.

| Lick the Home tab. | 2 | Click the Home tab. |
|---------------------------|---|----------------------------|
|---------------------------|---|----------------------------|

| | | 8 | 0 | D. | | | 4 | - 24 | | |
|----|-------------------|-------|--------|------|--------|------|------|------|------|-----|
| ı, | The original sour | GDP-A | Innual | | h Rate | | | | | |
| ł. | | 3998 | 2000 | 3008 | 3005 | 2002 | 2000 | 2004 | 2005 | 200 |
| ٤. | Austria | 3.9% | 2.7% | 5.1% | 0.7% | 1.2% | 0.8% | 2.2% | 1.8% | 2.6 |
| | Relation | 2.0% | 3.2% | 3.9% | 0.7% | 0.9% | 1.7% | 2.8% | 1.5% | 2.5 |
| 5 | Cal | 4.1N | 3.6h | 3.4% | 1.8% | 3.4% | 2.0% | 2.3% | 4.8% | 3.2 |
| ٤. | Denim a | 2.5% | 2.6% | 2.8% | 1.7% | 0.5% | 0.7% | 2.4% | 3.4% | 2.5 |
| 2 | Finland | 5.0N | 3.4% | 5.1% | 1.1% | 2.2% | 2.4% | 3.7% | 3.2% | 8.7 |
| í. | France | 1.4% | 3.2% | 5.2% | 2.2% | 1.7% | 0.8% | 2.3% | 1.2% | 1.9 |
| í. | Gormany | 2.0% | 2.0% | 4.9% | 1.2% | 0.2% | 0.8% | 1.6% | 1.2% | 1.9 |
| ő | Greene | 14N | 1.4N | 4.0% | 4.1% | 1.4% | 4.7% | 4.2% | 1.7% | 3.5 |

| XI. | a 9.0. | | 0 | 1 | SOF Grandh R | ates - Mice | codt Excel | | | - basis | - |
|-----|--------------|------------------|---------------------------------------|------------|---|-------------|---------------|----------------|----------------|-----------|-------------|
| 1 | in Name | - | 2 | nd Farms | ier Dete | finites. | Vev | Developer | | + 0 - | - # 1 |
| | Caller Table | Reliev Reliev | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | ing = Ministra Ig = Lig South Ing = O Other Charls | a- 18 | ipenine | Rose Hyperical | A Tet Ba | Proder Mi | ST Sympo |
| | AL | | - 1 | 6 The orig | final acurce | for this d | ista is hetp; | (/tw/wei.com/ | | | |
| | A | | 8 | ¢ | D | e. | | 6 | H | | |
| 1 | The original | - | GDP- | Annual | Growt | th Rat | | | | | |
| 2 | | | 22986 | 1999 | 2000 | 2005 | 3002 | 2003 | 2964 | 2005 | 20 |
| 2 | Austria | | 3.9% | 2.7% | 5.2% | 0.7% | 1.3% | 0.8% | 2.2% | 1.9% | 2.0 |
| 4 | seighten | | 2.0% | 3.2% | 1.9% | 0.7% | 0.9% | 1.3% | 2.9% | 1.5% | 2.5 |
| 5 | Canada | | 4.1% | 5.6% | 5.4% | 1.8% | 3.4% | 2.0% | 2.9% | 4.6% | 3.2 |
| | Denmark | | 2.5% | 2.676 | 2.8% | 1.3% | 0.5% | 0.7% | 2.4% | 3.4% | 2.5 |
| ч. | | | 5.0% | 3.4% | 5.2% | 3.3% | 2.2% | 2.4% | 3.7% | 3.3% | 3.2 |
| 7 | Pletand | | | | | - | | | | | |
| 7 4 | Fance | | 3.4% | 3.2% | 5.3% | 2.2% | 1.2% | 0.8% | 2.5% | 1.2% | - 1.5 |
| - | | | 3.4% | 3.2% | 4.5% | 12% | 0.2% | 0.0% | 1.6% | 1.2% | 15 |

3 Click Wrap Text ().

Excel turns on text wrapping for the selected cell.

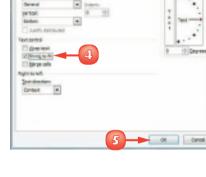
- 21164 10.00 Call Byten * The state he original source for this data is http://pwivel.com GDP-Annual Growth Rate 1000 1890 2000 3005 3000 3081 2004 2005 26 2.4 3 Austria 3.9% 2.7% 5.2% 0.7% 1.3% 0.8% 2.2% 1.9% 4 Belgium 2.0% 3.2% 1.9% 0.7% 0.9% 1.1% 2.9% 1.5% 2.5 5 Canada 4.1% 5.6% 5.4% 1.8% 3.4% 2.0% 2.9% 4.6% 3.2 6 Desman 2.5% 2.6% 2.8% 1.3% 0.8% 0.7% 2.4% 1.0% 2.5 5.0% 1.4% 5.2% 1.3% 2.2% 2.4% 3.7% 1.1% 3.2 **Pietano** 3.4% 1.2% 1.2% 0.0% 2.5% 1.2% 15 d Annua 5.9% 3,954 2.0% 2.0% 4.5% 12% 0.2% 0.0% 1.6% 12% 15 2 Germany 3.5 3.4% 3.4% 4.5% 4.3% 3.8% 4.7% 4.2% 1.7%
- Λ If the cell has more text than can fit horizontally, Excel wraps the text onto multiple lines and increases the row height to compensate.

View Text Without Turning on **Text Wrapping**

- m You can widen the column until you see all your text; see "Change the Column Width" earlier in this chapter.
- You can reduce the cell font size. 2 One way to do this is to choose a smaller value in the Font Size list of the Home tab's Font group.
- 3 An easier way is to click the Alignment group's dialog box launcher (
) to open the Format Cells dialog box with the Alignment tab displayed.
- Click the **Shrink to fit** check box (\square changes to \blacksquare).
 - Click OK.

| | A | 8 | C | D | 1 | F. | 6 | н | | |
|----|---------|-------|-------|-------|--------|------|------|------|------|------|
| 1 | | COP-A | nnual | Growt | h Rate | | | | | |
| 2 | | 1998 | 3999 | 3008 | 2006 | 2002 | 2005 | 2004 | 2885 | 299 |
| 3 | Austria | 3.9N | 3.7% | 5.3% | 0.7% | 1.7% | 0.8% | 2.2% | 1.9% | 2.8 |
| 4 | Reigium | 2.0% | 3.2% | 3.9% | 0.7% | 0.9% | 1.3% | 2.8% | 1.5% | 3.15 |
| 5 | Camada | 4.1% | 5.6% | 5.4% | 1.8% | 3.4% | 2.8% | 2.8% | 4.8% | 3.2 |
| 6 | Denmark | 2.8% | 2.6% | 2.8% | 1.3% | 0.9% | 0.7% | 2.4% | 3.4% | 2.5 |
| 7 | Fisland | 5.0% | 1.4% | 5.1% | 1.1% | 2.2% | 2.6% | 1.7% | 1.0% | 1.7 |
| 8 | France | 3.4% | 3.2% | 5.3% | 2.1% | 1.2% | 0.8% | 2.3% | 1.2% | 1.2 |
| 9. | Germany | 2.0% | 2.0% | 4.9% | 1.7% | 0.7% | 0.2% | 1.8% | 1.2% | 1.9 |
| 10 | Greece | 1.4% | 8.4% | 4.9% | 4.8% | 2.8% | 4.75 | 4.2% | 8.2% | 8.5 |

| Text algebraid | Orentelan |
|-------------------------------|--------------|
| gerantel General · Indenia | |
| vertox: 0 to- | Ŧ . |
| later + | 1 Test |
| ants deviced | 1 |
| fext pertrol | |
| Come territ | a in Depress |
| 2 Marg and -4 | A Differen |
| C birge ofe | |
| type as with | |
| Industan | |
| Cartest · | |
| | |
| | |
| | |

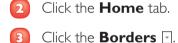


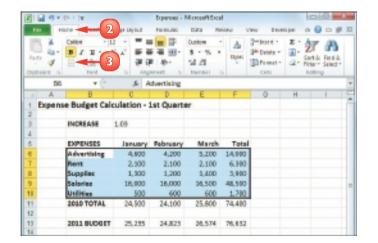
ADD BORDERS TO A RANGE

You can make a range stand out from the rest of your worksheet data by adding a border around it. You can also use borders to make a range easier to read. For example, if your range has totals on the bottom row, you can add a double border above the totals. Borders are also useful if a worksheet has several ranges that appear close to each other. By surrounding each range with a border, you make it clearer that your worksheet consists of multiple, separate ranges.

 \square Select the range that you want to format.

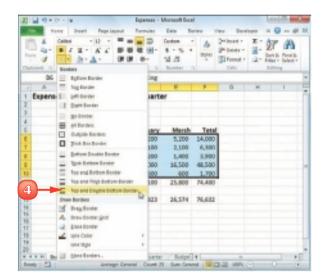
| | 8 | 6 | 0 | E | | 1.5 | 11 | | 1.77 |
|-------|-----------------|---|--|---|--|---|---|--|--|
| Expen | se Budget (| Calculation | - 1st Que | arter | | | | | |
| | | | | | | | | | |
| | INCREASE. | 1.03 | | | | | | | |
| | | | | | | | | | |
| | EXPENSES. | January | Petropre | Merch | Total | | | | |
| | Column 1 and | 4,530 | 4,310 | 5,200 | 18,808 | | | | |
| | Reg | 2,180 | 2,180 | 2,100 | 5.400 | | | | |
| | Sugalies | 1.300 | 1,210 | 1.400 | 18.50 | - | | | |
| | Salaries | 16,080 | 16.890 | 15.500 | 32,908 | | | | |
| | Utilities | 580 | 680 | 600 | 25.200 | | | | |
| | 2918 TOTAL | 24,580 | 24,190 | 25.800 | 92,900 | | | | |
| | | | | | | | | | |
| | 2911 BUDGET | 25.296 | 24,823 | 25.574 | 95.078 | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | idget - 1st qua | rber / Budge | | | | | | _ | ۶I. |
| dy 🗂 | | Armitige Calles | at Court 25 | SUE SHIEL | a 100 10 1 | 108% | | | ۰. |
| | | INCREASE EXPENSES Schwerting Rent Supplike Saturies Unitides 2018 TOTAL 2018 BUDGET | HIGRELSE 1.03 EXPENSES Jensory Schemary Schemary | INCREASE 1.03 EXPENSE 5 Amager Petrugry Solvertilling 4.880 4.380 Rent 2.180 2.180 Sapplies 1.380 1.280 Sapplies 1.380 2.180 Sapplies 1.380 2.180 Salarisa 16.00 16.800 Utilities 5.80 680 2918 TOTAL 24.590 24.190 2911 BUDGET 25.296 24.123 | EXPENSES January Petruary March Schwertining 4,580 4,280 5,200 Henr. 2,110 2,100 2,100 2,100 Suppliers 1,330 1,280 1400 5,200 Suppliers 1,330 1,280 1400 5,000 Suppliers 5,800 16,800 16,900 16,900 JOBROPHIC 5,800 24,100 25,800 29,100 25,800 2911 BUDGET 25,295 24,823 26,574 44,900 26,974 | INCREMSE 1.03 CMENTERS January Petruary March Total Schweitling 8.210 4.310 5.200 11.06 Rent 2.110 2.110 2.100 5.408 Sapplies 1.330 1.280 16.500 32.508 Mittlee 5.00 6.00 65.001 25.208 Mittlee 5.00 24.100 25.001 52.508 2919 TOTAL 24.580 24.123 25.574 95.371 * M Redact - 1st.gaseter Redact - 2nd Quarter 7.8492 4 | INCREASE 1.03 EXPENSES Amager Petrugary March Total Solvertising 6.380 6.380 5.200 18.09 Rent 2.180 2.180 2.100 5.408 Sapplies 1.300 1.280 16.500 16.001 Salarise 16.000 16.800 16.500 25.206 Militizes 580 680 600 25.206 2918 TOTRAL 24.580 24.180 25.574 55.371 * M Reduct - 1st Quarter Reduct - 21d Quarter 56.021 4 | Expense Buckget Calculation - 1st Quarter INCREASE 1.03 EXPENSES January Petruary March Total EXPENSES 4.50 4.310 5.200 19.001 Rew 2.180 2.110 2.100 5.400 Sapplies 1.300 1.200 14.001 15.001 Salatriae 16.000 6.00 6.00 25.000 Utilities 5.00 6.00 6.00 25.000 2919 TOTAL 24.500 24.100 25.800 92.900 2911 BUDGET 25.206 24.122 25.574 15.378 | Expense Buckget Calculation - 1st Quarter INCREASE 1.03 EXPENSES January Petruary March Total EXPENSES 4.80 5.900 19.801 Rew 2.180 2.100 5.900 19.801 Sapplies 1.300 1.280 16.900 25.001 Utilities 580 680 600 25.001 2818 TOTAL 24.980 24.180 25.800 12.800 2911 BUDGET 25.206 24.122 25.574 15.378 |





94

Click the type of border you want to use.



Excel applies the border to the range.

| | A B | C | 0 | E | F | н | 1 | 1.5 |
|-------|--------------------|-------------|-------------|--------|--------|---|---|-----|
| 1 Exp | pense Budget (| Calculation | n - 1st Que | arter | | | | |
| 2 | _ | | | | | | | |
| 3 | INCREMSE | 1.03 | | | | | | |
| 4 | | | | | | | | |
| 5 | EXPENSES | January | Petranty | Merch | Total | | | |
| 6 | Advertising | 4,680 | 4,390 | \$ 200 | 10,000 | | | |
| 7 | Reit | 2,180 | 2,180 | 2,100 | 5.400 | | | |
| 8 | Supplies | 1.300 | 1.290 | 1.400 | 18,500 | | | |
| 9 | Salaries | 16,080 | 16.880 | 15.500 | 32,906 | | | |
| 10 | Utilities | 680 | 680 | 600 | 25.200 | | | |
| 11 | 2010 TOTAL | 24,580 | 24,190 | 25,800 | 92,600 | | | |
| 12 | | | | | | | | |
| 13 | 2011 BUDGET | 25,235 | 24,823 | 25,574 | 95.3TE | | | |
| 1.0 | | | | | | | | |

 $\overline{\checkmark}$

You can make your borders stand out from the gridlines by clicking the Borders ⊡, clicking Line Style, and then selecting a thicker border style. You can click Line Color and then click a colour that is not a shade of grey. You can also turn off the worksheet gridlines by clicking the View tab. In the Show group, click the Gridlines check box (I changes to □). You can draw a border by hand. Click the Borders I and then click Draw Border. Use the Line Style and Line Color lists to configure your border. Click a cell edge to add a border to that edge; click and drag a range to add a border around that range. If you prefer to create a grid where the border surrounds every cell, click the Draw Border Grid command instead.

CONTENTS

- 98 Understanding Excel Formulas
- **100** Build a Formula
- IO2 Understanding Excel Functions
- IO4 Add a Function to a Formula
- 106 Add a Row or Column of Numbers
- 108 Build an AutoSum Formula
- Add a Range Name to a Formula
- II2 Reference Another Worksheet Range in a Formula
- 114 Move or Copy a Formula



BUILDING FORMULAS AND FUNCTIONS

Are you ready to start creating powerful and useful worksheets by building your own formulas? This chapter explains formulas, shows you how to build them, and shows you how to incorporate Excel's versatile worksheet functions into your formulas. You also learn useful formula techniques such as how to sum a row or column of numbers, how to create quick formulas using the AutoSum feature, how to use range names and ranges from other workbooks in your formulas, and how to move and copy formulas.



UNDERSTANDING EXCEL FORMULAS

To get the most out of Excel, you need to understand formulas so that you can perform calculations on your worksheet data. You need to know the components of a formula, you need to understand arithmetic and comparison formulas, and you need to understand the importance of precedence when building a formula.

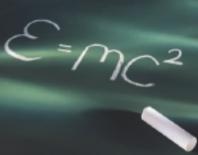
Formulas

A *formula* is a set of symbols and values that perform some kind of calculation and produce a result. All Excel formulas have the same general structure: an equals sign (=) followed by one or more operands and operators. The equals sign tells Excel to interpret everything that follows in the cell as a formula. For example, if you type **=5+8** into a cell, Excel interprets the 5+8 text as a formula and displays the result (13) in the cell.



Operands

Every Excel formula includes one or more *operands*, which are the data that Excel uses in the calculation. The simplest type of operand is a constant value, which is usually a number. However, most Excel formulas include references to worksheet data, which can be a cell address (such as B1), a range address (such as B1:B5), or a range name. Finally, you can also use any of Excel's built-in functions as an operand.



Operators

In an Excel formula that contains two or more operands, each operand is separated by an *operator*, which is a symbol that combines the operands in some way, usually mathematically. Example operators include the plus sign (+) and the multiplication sign (*). For example, the formula =BI+B2 adds the values in cells BI and B2.



Arithmetic Formulas

An arithmetic formula combines numeric operands – numeric constants, functions that return numeric results, and fields or items that contain numeric values – with mathematical operators

to perform a calculation. Because Excel worksheets primarily deal with numeric data, arithmetic formulas are by far the most common formulas used in worksheet calculations.

There are seven arithmetic operators you can use to construct arithmetic formulas:

| Operator | Name | Example | Result | | |
|----------|----------------|---------|--------|--|--|
| + | Addition | =10 + 5 | 15 | | |
| _ | Subtraction | =10-5 | 5 | | |
| - | Negation | =-10 | -10 | | |
| * | Multiplication | =10 * 5 | 50 | | |
| / | Division | =10/5 | 2 | | |
| % | Percentage | =10% | 0.1 | | |
| ^ | Exponentiation | =10 ^ 5 | 100000 | | |

Comparison Formulas

A comparison formula combines numeric operands – numeric constants, functions that return numeric results, and fields or items that contain numeric values – with special operators to compare one operand with another. A comparison formula always returns a logical result. This means that if the comparison is true, then the formula returns the value 1, which is equivalent to

the logical value TRUE; if the comparison is false, then the formula returns the value 0, which is equivalent to the logical value FALSE.

There are six operators you can use to construct comparison formulas:

| Operator | Name | Example | Result |
|----------|--------------------------|-------------|--------|
| = | Equal to | =10 = 5 | 0 |
| < | Less than | =10 < 5 | 0 |
| < = | Less than or equal to | = 0 < = 5 | 0 |
| > | Greater than | = 0 > 5 | 1 |
| > = | Greater than or equal to | = 0>=5 | |
| < > | Not equal to | = 0 <> 5 | 1 |

Operator Precedence

Most of your formulas include multiple operands and operators. In many cases, the order in which Excel performs the calculations is crucial. Consider the formula **=3+5^2**. If you calculate from left

to right, the answer you get is 64 (3+5) equals 8 and 8^2 equals 64). However, if you perform the exponentiation first and then the addition, the result is 28 (5² equals 25 and 3+25 equals 28).

To solve this problem, Excel evaluates formulas according to a predefined order of precedence, which is determined by the formula operators:

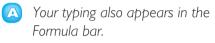
| Operator | Operation | Precedence |
|-------------|-----------------------------|------------|
| () | Parentheses | lst |
| _ | Negation | 2nd |
| % | Percentage | 3rd |
| ^ | Exponentiation | 4th |
| * and / | Multiplication and division | 5th |
| + and – | Addition and subtraction | 6th |
| = < < = > > | Comparison | 7th |
| = < > | | |

BUILD A FORMULA

You can add a formula to a worksheet cell using a technique similar to adding data to a cell. To ensure that Excel treats the text as a formula, be sure to begin with an equals sign (=)and then type your operands and operators.

When you add a formula to a cell, Excel displays the formula result in the cell, not the formula itself. For example, if you add the formula **=C3+C4** to a cell, that cell displays the sum of the values in cells C3 and C4. To see the formula, click the cell and examine the Formula bar.

- Click in the cell in which you want to build the formula.
 - Type **=**.



Note: You can also type the formula into the Formula bar.

3 Type or click an operand. For example, to reference a cell in your formula, click in the cell.



Excels inserts the address of the clicked cell into the formula.

| | | - | | | A) | | | | | | | _ | | |
|---|---------------|----------|----------|-------|----------|--------|-------|-------|--------|-------|---------|--------|-------|--------|
| | * | 0 | <u> </u> | 0 | <u> </u> | F | G | 11 | | | . K. | | 64 | N |
| 1 | Tales. | Jan . | rela - | Mar | Apr | May | 268 | bal | Aug | Sep | DH1 | Mev | 1244 | TOTAL |
| | Division I | 28800 | 298000 | 34000 | 28300 | 296000 | 25400 | 36000 | 24000 | 34000 | 36000 | 24000 | 34000 | 294000 |
| 1 | Division II | 34750 | 27900 | 29500 | 11000 | 38500 | 10000 | 11000 | 299000 | 29500 | \$2008 | 299000 | 29500 | 334650 |
| 6 | Division III | 34400 | 24300 | | 30000 | 27600 | 16756 | 27000 | 25(290 | 15256 | 20000 | 25(250 | 15256 | 330500 |
| 5 | NALES FORM. | 14 | | | | | | | | | | | | |
| Ū | | | | | - | | | _ | | | _ | | | |
| | | - | | | | | | | | | | | | |
| | | _ | | | | | | | | | | | | |
| L | | <u> </u> | | | | | | | | | | | | |
| | | 0 | | | | | | | | | | | | |
| 1 | | 2 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | s a ni sheett | / Part) | / 101442 | 17417 | | | | | 4 | | | | | 1 10 |
| | se 🖾 | | | | | | | | | | 1 23 10 | | | |

| | 4 | 0 | 0 | 0 | 5 | - F | | 41 | 1 | | - K | 5 | 54 | 14 |
|---|--------------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|-------|--------|---------|-------|
| 1 | Tales | Jan | Pelo | Ma | dar. | May | 248 | bul | Aug | dep | DH1 | Meu | Cheel . | TOTAL |
| | Division I | 78800 | - | 3 | 28100 | 29000 | 25400 | 36000 | 24000 | 34000 | 36000 | 24000 | 24000 | 29400 |
| | Division II | 34750 | 27900 | and the second | 33000 | 38900 | 10000 | 11000 | 29900 | 29500 | 13000 | 29900 | 29500 | 10445 |
| | Division III | 34400 | 24300 | 15256 | 20000 | 27600 | 16756 | 27000 | 25250 | 15256 | 28000 | 25/290 | 15256 | 33000 |
| | MALES TOTAL | 182 | 5 | | | | | | | | | | | |
| | | | 3 | - | - | | - | _ | 1 | | _ | | | _ |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | |

4 Type an operator.

- Repeat Steps 3 and 4 to add other operands and operators to your formula.
- 🙆 Click 🗹 or press Enter.
 - Excel displays the formula result in the cell.

| | | - C - | 0 | | - F | G | 11 | 1 | 5 | - K | 6 | 64 | N |
|--------------|---|--|---|--|--|--|--|--|---|---|--|---|---|
| tales | Jan | (Fails | Mar. | Apr | May | 244 | bal | Aug | Sep | Chill . | Meu | Ches . | TOTAL |
| Division I | 28800 | | 34000 | 28100 | 29000 | 25400 | 36000 | 24000 | 34000 | 36000 | 24000 | 34000 | 294000 |
| Division II | 24750 | 6 | 29500 | 31000 | 38300 | 10000 | 11000 | 29900 | 29500 | \$2008 | 299000 | 29500 | 354650 |
| Division III | 34400 | | 150 | 1000 | 27600 | 16756 | 27000 | 25/290 | 15256 | 20000 | 25(290 | 15256 | 330500 |
| WALES TOTAL | 182+81 | + 10 | | 5 | | | | | | | | | |
| | | | | | | | | 1 | - | _ | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 0 | | | | | | | | | | | | |
| | 4 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| a m sheett | / Parts | / 37440 | 1747 | | | | | 4 | | | | | 1 1 |
| | talas Division I Division II Division III Malis ROMAL | salas tan Decolor I Decision II Sector II Sect | Alata Monte II Records III Record II Record II Records II Record II Record II Record III | Adda Anno 1997 A | Late Late Full Max Apr Deroder II 20000 6 20000 <td>1242 127 128 128 128 128 128 128 128 128 128 128</td> <td>Late Late Path Inter Appr May Dues Derodern II 28805 60 28800<!--</td--><td>Label Tate Mar Apr Mary Date July <thj< td=""><td>Late Late Path Mater Aper Mary State Aper Aper State Aper Aper State Approximation <th< td=""><td>Labe Tate Mair Apr May Data Rug Supp Operation I 28500 28500 28500 28600<td>Lake Jam Path Mar Apr May Turn Iul Rag Support 20000</td><td>Late Full Mair Apr Mair Late Mair Same Control Same <</td><td>Lake Jam Path Mar Age Mary June Jul Sugg Sug</td></td></th<></td></thj<></td></td> | 1242 127 128 128 128 128 128 128 128 128 128 128 | Late Late Path Inter Appr May Dues Derodern II 28805 60 28800 </td <td>Label Tate Mar Apr Mary Date July <thj< td=""><td>Late Late Path Mater Aper Mary State Aper Aper State Aper Aper State Approximation <th< td=""><td>Labe Tate Mair Apr May Data Rug Supp Operation I 28500 28500 28500 28600<td>Lake Jam Path Mar Apr May Turn Iul Rag Support 20000</td><td>Late Full Mair Apr Mair Late Mair Same Control Same <</td><td>Lake Jam Path Mar Age Mary June Jul Sugg Sug</td></td></th<></td></thj<></td> | Label Tate Mar Apr Mary Date July July <thj< td=""><td>Late Late Path Mater Aper Mary State Aper Aper State Aper Aper State Approximation <th< td=""><td>Labe Tate Mair Apr May Data Rug Supp Operation I 28500 28500 28500 28600<td>Lake Jam Path Mar Apr May Turn Iul Rag Support 20000</td><td>Late Full Mair Apr Mair Late Mair Same Control Same <</td><td>Lake Jam Path Mar Age Mary June Jul Sugg Sug</td></td></th<></td></thj<> | Late Late Path Mater Aper Mary State Aper Aper State Aper Aper State Approximation Approximation <th< td=""><td>Labe Tate Mair Apr May Data Rug Supp Operation I 28500 28500 28500 28600<td>Lake Jam Path Mar Apr May Turn Iul Rag Support 20000</td><td>Late Full Mair Apr Mair Late Mair Same Control Same <</td><td>Lake Jam Path Mar Age Mary June Jul Sugg Sug</td></td></th<> | Labe Tate Mair Apr May Data Rug Supp Operation I 28500 28500 28500 28600 <td>Lake Jam Path Mar Apr May Turn Iul Rag Support 20000</td> <td>Late Full Mair Apr Mair Late Mair Same Control Same <</td> <td>Lake Jam Path Mar Age Mary June Jul Sugg Sug</td> | Lake Jam Path Mar Apr May Turn Iul Rag Support 20000 | Late Full Mair Apr Mair Late Mair Same Control Same < | Lake Jam Path Mar Age Mary June Jul Sugg Sug |

| | | 0 | C | 0 | C | T. | | - 21 | | 1 | - K | 1 | 64 | N C |
|------------------|--------------|-------|-------|-------|-------|-------|-------|-------|--------|-------|--------|--------|-------|--------|
| 1 | Sales | Jan | Felb | Mar | Apr | Mary | 200 | bul | Aug | 340 | Chrs. | Meu | Ches | TOTAL |
| | Division I | 28800 | 21000 | 34000 | 28300 | 25000 | 25400 | 36000 | 24000 | 34000 | 36000 | 24000 | 34000 | 294000 |
| 1 | Division II | 34750 | 27900 | 29500 | 33000 | 38500 | 30000 | 11000 | 299000 | 29500 | \$2000 | 299000 | 29500 | 10460 |
| 4 | Division III | 34400 | 24300 | 15256 | 36668 | 27660 | 16756 | 27000 | 25250 | 15256 | 28000 | 25/250 | 15256 | 330500 |
| 5 1 2 1 | MALIS TOT | Notes | | | - | | | | | | | | | |
| | TE sheets. | Press | 79:40 | 1/9/ | | | | - | • | 100 | | | 0 | |

Excel displays the formula result in the cell but it keeps track of the original formula. To display the formula again, you have two choices: click the cell and then edit the formula using the Formula bar or double-click the cell to display the original formula in the cell and then edit the formula. Press Enter when you finish editing the formula. You can configure the worksheet to show the formulas instead of their results. Click File, Options to open the Excel Options dialog box. Click the Advanced tab, scroll to the Display options for this worksheet section, click the Show formulas in cells instead of their calculated results check box (I changes to I), and then click OK. You can also toggle between formulas and results by pressing CTT + I.

UNDERSTANDING EXCEL FUNCTIONS

To build powerful and useful formulas, you often need to include one or more Excel functions as operands. You need to understand the advantages of using functions, you need to know the basic structure of every function, and you need to review Excel's function types.

Functions

A function is a predefined formula that performs a specific task. For example, the SUM function calculates the total of a list of numbers and the PMT (payment) function calculates a loan or mortgage payment. You can use functions on their own, preceded by =, or as part of a larger formula.

Function Advantages

Functions are designed to take you beyond the basic arithmetic and comparison formulas by offering two main advantages. First, functions make simple but cumbersome formulas easier to use. For example, calculating a loan payment requires a complex formula, but Excel's PMT function makes this easy. Second, functions enable you to include complex mathematical expressions in your worksheets that otherwise would be difficult or impossible to construct using simple arithmetic operators.



Every worksheet function has the same basic structure: NAME(Argument I, Argument 2, ...). The NAME part identifies the function. In worksheet formulas and custom PivotTable formulas, the function name always appears in uppercase letters: PMT, SUM, AVERAGE, and so on. The items that appear within the parentheses are the functions' *arguments*. The arguments are the inputs that functions use to perform calculations. For example, the function SUM(A1,B2,C3) adds the values in cells A1, B2, and C3.





Statistical Functions

The following table lists some common statistical functions:

| Function | Description |
|---------------------------|--|
| AVERAGE(number1,number2,) | Returns the average of the arguments |
| COUNT(number1,number2,) | Counts the numbers in the argument list |
| MAX(number1,number2,) | Returns the maximum value of the arguments |
| MEDIAN(number1,number2,) | Returns the median value of the arguments |
| MIN(number1,number2,) | Returns the minimum value of the arguments |
| MODE(number1,number2,) | Returns the most common value of the arguments |
| STDEV(number1,number2,) | Returns the standard deviation based on a sample |
| STDEVP(number1,number2,) | Returns the standard deviation based on an entire population |

Financial Functions

Most of Excel's financial functions use the following arguments:

| Argument | Description |
|----------|--|
| rate | The fixed rate of interest over the term of the loan or investment |
| nper | The number of payments or deposit periods over the term of the loan or investment |
| pmt | The periodic payment or deposit |
| pv | The present value of the loan (the principal) or the initial deposit in an investment |
| fv | The future value of the loan or investment |
| type | The type of payment or deposit: 0 (the default) for end-of-period payments or deposits; 1 for beginning-of-period payments or deposits |

The following table lists some common financial functions:

| Function | Description |
|---------------------------------|--|
| FV(rate,nper,pmt,pv,type) | Returns the future value of an investment or loan |
| IPMT(rate,per,nper,pv,fv,type) | Returns the interest payment for a specified period of a loan |
| NPER(rate,pmt,pv,fv,type) | Returns the number of periods for an investment or loan |
| PMT(rate,nper,pv,fv,type) | Returns the periodic payment for a loan or investment |
| PPMT(rate,per,nper,pv,fv,type) | Returns the principal payment for a specified period of a loan |
| PV(rate,nper,pmt,fv,type) | Returns the present value of an investment |
| RATE(nper,pmt,pv,fv,type,guess) | Returns the periodic interest rate for a loan or investment |

ADD A FUNCTION TO A FORMULA

To get the benefit of an Excel function, you need to use it within a formula. You can use a function as the only operand in the formula, or you can include the function as part of a larger formula.

In "Understanding Excel Functions," you learned that Excel has many functions and that most functions take one or more arguments, but it is often difficult to remember a function's arguments and the order in which they appear. To make it easy to choose the function you need, and to add the appropriate arguments, Excel offers the Insert Function feature.

- Click in the cell in which you want to build the formula.
 - Туре =.
- Type any operands and operators you need before adding the function.
- Olick the Insert Function button (E).

The Insert Function dialog box appears.

- Click and then click the category that contains the function you want to use.
- 6 Click the function.
- 7 Click **OK**.

| A B C D | 6 | 1 | 0 | | 1 | - K |
|--------------------------------------|---|---|---|--|---|-----|
| Calculating Annual Loan Payments | | | | | | |
| interest Rote 4% | | | | | | |
| Tears 5 | | | | | | |
| Ampant 5 10:000 | | | | | | |
| Yandy Payment r | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 2 | | | | | | |
| | | | | | | |
| *** #] sheets / Ports / Roots / St./ | | | | | | |

| Inset Function | | C.C. Box Com |
|-------------------------------------|-----------------------------------|------------------------|
| Search for a function: | | |
| Trige a brief description | on of what you want to its and it | 40.0X |
| Or select a gategory: | Priercel | - 5 |
| Select a function | | - |
| CODIFICE CODIFICE | | |
| CODE,MOCH | | |
| 1947 | 6 | |
| PRICE | | - |
| PETTI-MOLAPEK, PAL | | |
| Caluades Depayment mitmesi sala. | d for a loss based on constant p | eynemic and a constant |
| | - | |

The Function Arguments dialog box appears.

- 8 Click inside an argument box.
- Olick the cell that contains the argument value.

You can also type the argument value.

- Repeat Steps **8** and **9** to fill as many arguments as you need.
 - The function result appears here.
- 🔟 🛛 Click **OK**.
 - B Excel adds the function to the formula.
 - Excel displays the formula result.

Note: If your formula requires any other operands and operators, press 2 and type what you need to complete your formula.

Note: In this example, the result appears in parentheses to indicate a negative value. In loan calculations, money that you pay out is always a negative amount.



You do not necessarily have to specify a value for every function argument. In the PMT function, for example, the rate, nper and pv arguments are required, but the fv and type arguments are optional. When the Function Arguments dialog box displays a result, you have entered all of the required arguments.





If your loan payment worksheet contains an annual interest rate and a loan term in years, you need to convert the rate and term to monthly values to calculate the monthly payment using the PMT function. That is, you divide the annual interest rate by 12 and multiply the term by 12. For example, if the annual rate is in cell B2, the term in years is in B3, and the loan amount is in B4, the function PMT(B2/12, B3*12, B4) calculates the monthly payment.

ADD A ROW OR COLUMN OF NUMBERS

You can quickly add worksheet numbers by building a formula that uses Excel's SUM function.

Adding a range of numbers is probably the most common worksheet calculation, so it is useful to know how to use Excel's SUM function. Although you can use SUM to add individual cells or a rectangular range of cells, you will most often need to add a row or a column of data. In this case, when you use the SUM function in a formula, you can specify as the function's argument a reference to a row or a column of numbers.

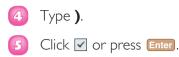
- Click in the cell where you want the sum to appear.
 - Type **=sum(**.
 - A When you begin a function, Excel displays a banner that shows you the function's arguments.

Note: In the function banner, arguments in bold are required and arguments that appear in square brackets are optional.

- Use the mouse ¹ to click and drag the row or column of numbers that you want to add.
 - Excel adds a reference for the range to the formula.

| PVF | +(* X V A +) | | D | 1 | 1 | 6 | н | - |
|------------|--------------------------|-------------|---------------|---|---|---|---|----|
| 2 | Sales Rep | 2009 Sales | 2010 Sales | - | | | | - |
| 3 | Nancy Reekafer | \$996.336 | \$940,492 | | | | | |
| 4 | Andheus Censini | \$606,731 | \$577,983 | | | | | |
| 5 | Jan Kotas | \$623,786 | \$967,580 | | | | | |
| 6 | Mariya Seglerika | \$768.837 | \$771,389 | | | | | |
| P. | Staven Thorpe | 5863.589 | 5827,255 | | | | | |
| | Michael Neipper | \$795,518 | \$669,294 | | | | | |
| 0 | Robert Zare | \$723,740 | \$838,945 | | | | | |
| 20 | Leura Guzzani | \$993,899 | \$574,472 | | | | | |
| 11 | Anne Hellung-Larsen | \$456,380 | \$837,993 | | | | | |
| | Ryne Herper | 5908.623 | \$569,689 | | | | | |
| 13 | David Ferry | \$963,232 | \$558,601 | | | | | |
| 4 | Paul Vouetcla | 5645.095 | \$492,183 | | | | | |
| 15 | Andrea Aster | \$540,464 | \$690,762 | | | | | |
| 16 | Charles Grunek | 545b.233 | \$833,094 | | | | | |
| | Karan Allaton | 2 | \$511,569 | | | | | |
| 10 | Karen Hammond | - Lan | \$875,455 | | | | | |
| | Vince Durbin | 59,510,265 | \$599,514 | | | | | |
| 10 | Paul Richardson | 5 79,732 | \$596,353 | | | | | |
| 71 | Dregg O'Danleghue | 5 \$1.802 | 14 | | | | | |
| 12 | TOTA | 4-9.40 | | 6 | | | | |
| 2.8. | | 10A/Queelor | al present of | | A | | | |
| 4.8.91 104 | 11/1000/12/ | | 84 | | | | _ | ×Ε |
| inter 📇 | | | | | | a | | |

| A | | 6 | D | T. | 1 | - G - 1 | H | |
|----|------------------------|--------------------------|------------|----|---|---------|---|--|
| 2 | Soles Rep | 2009 Sales | 2010 Sales | | | | | |
| 2 | Nancy Reebafer | \$104.134 | \$940,492 | | | | | |
| 4 | Andheur Cencini | \$606,731 | \$877,983 | | | | | |
| 5 | ion Kotes | \$623,785 | \$967,580 | | | | | |
| 6 | Mariya Seglerika | 1786.837 | \$771,889 | | | | | |
| 7 | Staven Thorpe | \$963,589 | 5827,255 | | | | | |
| | Michael Neipper | \$ 96,518 | \$660,204 | | | | | |
| | Robert Zare | \$172,740 | \$836,945 | | | | | |
| 30 | Leura Gusseni | 59 0.009 | \$578,472 | | | | | |
| 31 | Anne Hellung-Larsen | 544 1,380 | \$837,993 | | | | | |
| | Ryna Harper | 590, 615 | \$568,689 | | | | | |
| 33 | David Ferry | \$940 272 | \$558,601 | | | | | |
| 24 | Feul Vouetcla | 5645.991 | \$492,183 | | | | | |
| 25 | Andrea Arzer | \$540, \$4 | \$690,762 | | | | | |
| 95 | Charles Grunek | 5650.2 8 | \$823,094 | | | | | |
| | Keren Allaton | \$508.8 0 | \$511,549 | | | | | |
| 38 | Karen Hammond | \$101,61 | \$875,455 | | | | | |
| 19 | Vince Ourbin | \$650.26 | \$599,524 | | | | | |
| 30 | Paul Richardson | \$779,733 | \$596,15 | | | | | |
| 21 | Gregg (7 Danleghue | \$1582.800 ⁻⁰ | 3 | | | | | |
| 22 | TOTA | 4 -9.40001.02 | | | | | | |
| | | 10A/Guarda | B | | | | | |



| 940 | * * X * 5 * | um(C3:C15) | | | | | |
|----------|------------------------|--------------|------------|-------|------|---|------|
| 1 A | | ć | D | P | - G | H | 1.0 |
| 2 | Sales Rep | 2209 Sales | 2000 Sales | | | | |
| 3 | Namey Treats ar | \$996.338 | \$860,482 | | | | |
| 4 | Andrea C 5 | \$686,736 | \$577,983 | | | | |
| 5 | Jan Kotas | \$622,785 | \$967,580 | | | | |
| | Mariya Sanglarika | \$785.317 | \$771,389 | | | | |
| 7 | Steven Thospe | \$863,589 | \$817,252 | | | | |
| .0 | Michael Neigowr | \$795.518 | \$868,394 | | | | |
| + | Robert Dare | \$723,348 | \$616,945 | | | | |
| 10 | Léora Glusseel | \$993,259 | \$874,472 | | | | |
| 11 | Anne Hellung-Lorpen | \$659,340 | \$827,992 | | | | |
| 12 | Kysa Harper | \$509.623 | \$568,689 | | | | |
| 13 | David Ferry | \$987,777 | 5558,681 | | | | 1.14 |
| 14 | Paul Voyatzis | \$685,895 | \$692,182 | | | | |
| 15. | Andrea Autor | \$540,484 | \$490,782 | | | | |
| 15 | Charles Granek | \$650,733 | \$823,034 | | | | |
| 17. | Karan Kilston | \$509.863 | \$811,549 | | | | |
| 15 | Karan Hammond | \$583.899 | 5875,455 | | | | |
| 39 | Vince Durbin | \$680,268 | \$599,504 | | | | |
| 30 | Faul Elchardson | \$779,732 | \$594,353 | | | | |
| 23 | Gragg O'Danaghua | \$982.802 | \$652.171 | | | | |
| 22 | TOTA | 4 -0.0000000 | | | | | |
| 23 | | | | | | | |
| | beeti /Sheeti / 51/ | | Batt | | | | 12 |
| Linker 🐮 | and a marked of | | | | 1075 | | |

Excel enters the formula.

Excel displays the sum in the cell.

| C22 | - (* A) +B | UMICE-CESI | | | | | | |
|--------|------------------------|---------------|------------|---|-----------|-----------|---|-----|
| A 4 | - 0 | C | | 4 | 1 | 6 | N | |
| 2 | Soles Rep | 2008 Sales | 2839 Selee | | | | | |
| 2 | Nancy Reebafer | \$196,316 | \$960,492 | | | | | 1 |
| 4 | Andrew Centini | \$606,753 | \$171,883 | | | | | |
| 5 | Jan Kotas | \$622,795 | \$967,588 | | | | | |
| 6. | Mariya Neglerika | \$765,827 | \$771.898 | | | | | |
| 7 | Staven Thorpe | \$565,569 | \$627,213 | | | | | |
| | Michael Neipper | \$785,518 | \$669.094 | | | | | |
| 4 | Robert Zare | \$722,740 | \$626,845 | | | | | |
| 20 | Leura Gusseni | \$982,858 | \$574,472 | | | | | |
| 11 | Anne Hellung-Larsen | \$459.380 | \$827.882 | | | | | |
| | Ryne Herper | \$589,623 | \$549,809 | | | | | |
| 33 | David Ferry | \$1007,777 | \$158.803 | | | | | |
| 24 | Paul Vourtcla | \$685,090 | \$682.582 | | | | | |
| TE | Andrea Arter | \$540,494 | \$683,762 | | | | | |
| 95 | Charles Grunek | \$450,733 | \$823,854 | | | | | |
| | Karen Allaton | \$589,863 | \$501.568 | | | | | |
| 38 | Karen Hammond | \$523,699 | \$975,455 | | | | | |
| 19 | Vince Durbin | \$690,269 | \$589.514 | | | | | |
| 30 | Paul Richardson | \$779,723 | \$596.353 | | | | | |
| 21 | Gregg O'Danaghue | \$582,802 | TI | | | | | |
| 22 | | 4 513,414,518 | | | | | | |
| 22 | | | | | | | | |
| | wet1 / 9940 / 51/ | | E4 | _ | | _ | _ | 10 |
| isen 🗂 | and contraction of the | | | | 100 100 2 | 1 mm (2)- | _ | - 5 |



The SUM function works not only with simple row and column ranges, but with any rectangular range. After you type =sum(, use the mouse to click and drag the entire range that you want to sum. The SUM function can accept multiple arguments, so you can enter as many cells or ranges as you need. After you type =sum(, hold down cm and either click each cell that you want to include in the total, or use the mouse C to click and drag each range that you want to sum.

BUILD AN AUTOSUM FORMULA

You can reduce the time it takes to build a worksheet as well as reduce the possibility of errors by using Excel's AutoSum feature. By default, the AutoSum tool adds a SUM function formula to a cell and automatically adds the function arguments based on the structure of the worksheet data. However, you can also use AutoSum to quickly create simple formulas that use common functions, such as AVERAGE, COUNT, MAX, or MIN.

Click in the cell where you want the sum to appear.

Note: For AutoSum to work, the cell you select should be below or to the right of the range you want to sum.

- 2 Click the **Sum** button (Σ) .
 - If you want to use a function other than SUM, click the Sum and then click the operation you want to use: Average, Count Numbers, Max, or Min.



| 20 | H | | | | | 200.54 | e · Moo | atta | | | | | 101 | 2 = | 1 |
|------|--------------|-------|-------|---------|-----------|-------------------------|---------|----------|-------|-------|--------------------|---------|--------|-----------------|---|
| | a 8054 | inset | hprix | out # | prinulas. | 2103 | Rotein | Veri | beet | | | (| | 0.0 | 1 |
| 1 | | 1 H - | H - | ** | 10 H | 1 - 1 1 - 1 1 - 1 | 1 | Formal a | | E | Databar Databar | | ZI A | 8 12. | |
| _ | 06 | + (* | | 10 | | | | | | | | | | | 1 |
| 1 | | 8 | ¢ | D | 8 | 7 | 6 | | 1 | 1 | 6 | 4 | м | 8 | |
| | Salar | dam. | Reb | biter . | Apr | May | Jun | Jul. | Aug. | Sep | ðet. | Nov | Dec. | TOTAL | |
| | Division I | 21800 | 21000 | 34000 | 28,200 | 25000 | 21400 | 28000 | 34000 | 24000 | 28000 | 34000 | 24000 | 314000 | ė |
| 4 | Division II | 38790 | 27900 | 28800 | 84000 | \$0800 | 80000 | \$5,000 | 39900 | 28800 | \$2000 | 28800 | 299900 | \$34800 | i |
| 5 | Division III | 24400 | 24000 | 31250 | 20800 | 27988 | 36750 | 27680 | 25258 | 21250 | 26000 | 21250 | 25390 | 110000 | ł |
| 8 | SALES TOTAL | 20050 | | | _ | _ | _ | _ | _ | _ | _ | _ | - | _ | |
| 2 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 2.00 | a m sheets | 2440 | 1944 | | | | | | Tel. | | | | | | |
| - | 10 I I | | | | | | | | | | C3 23 1 | 895 (C) | | - | |

Excel adds a SUM function formula to the cell.

Note: You can also press Alt + = instead of clicking Σ .

- C Excel guesses that the range above (or to the left) of the cell is the one you want to add. If Excel guessed wrong, select the correct range.
- Click 🗸 or press Enter.
 - Excel displays the sum.

| | Δ. | | | D. | 5 | P | 0 | - 81 | - E | 1 | | L | M | 14 |
|---|---------------------|-------|----------|---------|-------|-------|-------|-------|--------|-------|--------|-------|-------|--------|
| | Sales | Jan . | Feb | Mar | Apr | May | Jun | Jul. | Ave | Sep | Oct | New | Dec | TOTA |
| | Civision I | 23500 | | 34000 | 25100 | 35000 | 25400 | 26080 | 3 2000 | 24000 | 36000 | 24808 | 24080 | 294000 |
| | Division II | 26750 | 3 | 1 | 93000 | 50500 | 30808 | 31000 | 29900 | 29500 | \$2000 | 29508 | 29580 | 358458 |
| | Division III | 35400 | | | 26600 | 27080 | 24750 | 27080 | 31350 | 28290 | 28000 | 21210 | 26250 | 830808 |
| | SALES TOTAL | 76650 | -5444 | (E-04) | | | | | | | | | | |
| | | 6 | COLUMN - | ander L | | | | | | | | | | |
| | | | 3 | | | | | | | | | | | |
| | | - | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| 3 | · · Sheeti | | | | | | | | | | | | | |

| | A | | C | | | | 0 | | | | | 1 | 14 | |
|----|---------------------|-------|-------|--------|-------|-------|-------|--------|--------|-------|--------|-------|-------|--------|
| ï | Sales | Jan | Feb | Mar | Apr | May | Jun | Aul. | has | Sep | Oct | Nev | Dec | TOTAL |
| 2 | division I | 23508 | 29080 | 3 4000 | 25100 | 35000 | 25408 | 26080 | 3.0000 | 24000 | | 24808 | | 294000 |
| F | Olivialon II | 26750 | 27980 | 29500 | 31000 | 30500 | 30808 | 310000 | 29500 | 29500 | \$2000 | 29508 | 29580 | 358456 |
| £. | Division III | 34408 | 24800 | 35350 | 26600 | 17080 | 34758 | 27080 | 35350 | 28290 | 38000 | 28280 | 26250 | 810000 |
| 5 | SALES TOTAL | 76850 | 79290 | | | | | | | | | | | |
| 6 | | | | D | | | | | | | | | | |
| 7 | | | | 9 | | | | | | | | | | |
| ×. | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | |
| 10 | · · · Sheeti | | | | | | | | | | | | | 1.1 |

You can use Excel's status bar to see the sum of a range without adding an AutoSum formula. When you select any range, Excel adds the range's numeric values and displays the result on the right side of the status bar - for example, Sum: 75200. By default, Excel also displays the Average and Count. If you want to see a different calculation, right-click the result in the status bar and then click the operation you want to use: Numerical Count, Maximum, or Minimum.

If the range you want to sum is a vertical column with a blank cell below it or a horizontal row with a blank cell to its right, select the range (including the blank cell) and then click Σ or press Alt+ \blacksquare . Excel populates the blank cell with a SUM formula that totals the selected range.

ADD A RANGE NAME TO A FORMULA

You can make your formulas easier to build, more accurate, and easier to read by using range names as operands. For example, the formula **=SUM(B2:BI0)** is difficult to decipher on its own because you cannot tell at a glance what kind of data is in the range B2:B10. However, with the formula **=SUM(Expenses)**, it is immediately obvious that the formula is adding a range of expense values.

If you are not sure what range names are or how to define a range name, see Chapter 3 to learn more about range names, including how to define names for ranges in Excel.

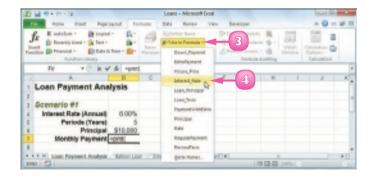
- Click in the cell in which you want to build the formula, type =, and then type any operands and operators you need before adding the range name.
- 2 Click the **Formulas** tab.

Click Use in Formula.

Excel displays a list of the range names in the current workbook.

Olick the range name you want to use.

| 20 | M P + P + N | | | | All smooth Date | od. | | | | 1018 | -0 |
|------------|------------------|-----------|--------------|---------------|-----------------|--|----------|--------------------------------------|--------|---------|----|
| | none inc | et Papela | yout formu | | 2 | feir Der | eloper | | | +0- | |
| The second | A | - A - | | | | alitianal From rait as Table Taples - Byles | atting - | Print - Print - Desit - Des | R II I | A Posta | |
| | FIY . | • C & 4 | & openi | | | | | | | | |
| | A | | D | C 0 | 1.6 | F | - 0 | N I | 1 | 2 | R. |
| 1 | Loan Payme | ent Anal | veis | | | | | | | | |
| 2 | | | | | | | | | | | |
| 5 | Scenerio #1 | | | | | | | | | | |
| 2 | Interest Rate | (Annual) | 6.00% | | | | | | | | |
| 5 | | . (Years) | 5 | | | | | | | | |
| 6 | | Principal | \$10,000 | | | | | | | | |
| 7 | Monthly | Payment | (MNO) | | | | | | | | |
| I. | | | Did yes, op- | Res Married | 1 | | | | | | |
| | A H Loan Payment | C.Nobsk. | Referr Last | / the wit Con | A / Finds | INT 4 | | | | | |
| 100 | 1 23 | | | | | | | (M 12 22 - 14 | | | |



A Excel inserts the range name into the formula.

- Type any operands and operators you need to complete your formula.
 - B If you need to insert other range names into your formula, repeat Steps 2 to 5 for each name.

6 Click ✓ or press Enter.

Excel calculates the formula result.

| | A | | 0 | - D | | P | 8 | H | - 2 | 1.CT |
|------|-----------------------------|-------------|------------|-------------|--------|----------|---|-----------|-------|------|
| 1 | Loan Payment Anal | lysis | | | | | | | | |
| ź | | | | | | | | | | |
| 3 | Scenario #1 | | | | | | | | | |
| 4 | Interest Rate (Armuel) | 6.00% | | | | | | | | - |
| ÷. | Periods (Years) | 5 | | | | | | | | |
| 6 | Principal | \$10,000 | | A | | | | | | |
| r. | Monthly Payment | prijetos | st, Rate | | | | | | | |
| 1 | | (FM1)sete r | par. pc. 7 | Net D | | | | | | |
| H - | + + + Lean Payment Analysis | Talson Low | Zhte | cent Conta. | / heat | a el 4 📖 | | | | 10 |
| Edit | 1 13 | | | | | | | C (1.100) | - | - |

| 1 | oan Payment Analysis |
|------|---|
| | |
| | toenario #1 6 |
| 4 | Interest Rate (Arman) 6.07% |
| 6 | Periods (Years) 5 |
| 6 | Principal \$10,000 |
| r. | Monthly Payment reprtintered, Rate, Loan, Term, Loan, Principal) |
| 0 | |
| ii - | Loan Payment Andreis / Telson Loan / Encod Cons / Proceed and 4 1 1 |
| Erb | |

If you create a range name after building a formula, you can convert the range reference to the range name. Click the Formulas tab, the Define Name , and then Apply Names to open the Apply Names dialog box. Click the range name you want to use and then click OK. Excel replaces the associated range references with the range name in each formula in the current worksheet.

As you build your formula, you can type the range name, if you know it. You can also click a cell or select a range with a defined name. Excel adds the name to your formula instead of the range address. To work from a list of defined range names, click an empty area of the worksheet, click Formulas, Use in Formula, Paste Names, and then click Paste List.

REFERENCE ANOTHER WORKSHEET RANGE IN A FORMULA

You can add flexibility to your formulas by adding references to ranges that reside in other worksheets. This enables you to take advantage of work you have done in other worksheets so you do not have to waste time repeating your work on the current worksheet.

You can even add references to ranges that reside in other workbooks.

- Click in the cell in which you want to build the formula, type =, and then type any operands and operators you need before adding the range reference.
 - Press Ctrl + ^{Page} worksheet you want to use appears.

| SALISTOFA Zopenena | 71,100 81,500 81,500 81,500 | 26,600 | 31,000 | 24,800 | 11.000 | 28,010 | 34,000 | | | | |
|---|--------------------------------------|----------|-----------|---------|---------|--------|------------|--------|----------|---------|--|
| | 86,380 | | 28.500 | | | | -34,1,1,10 | 24,808 | - 34,000 | 296,000 | |
| GALES TOTAL | | 21,000 | | 29,500 | 90000 | 22,898 | 28:500 | 19,509 | 81,000 | 108.508 | |
| Expenses | 4 340,990 | | 31,110 | 20,200 | TT:200 | 28,000 | 38,399 | 18,289 | 78,800 | 110,000 | |
| | | 84,000 | 76,753 | 76,750 | 346,600 | 85,810 | 36,750 | 78,753 | 341,680 | 962,038 | |
| | | | | | | | | | | | |
| Cent of Good | 14,788 | 6,730 | 6.300 | 8,300 | 298,300 | 5,580 | 6,300 | 6,500 | 19,480 | 77,004 | |
| and-wattaring | 15,790 | 5.900 | 5.200 | 5,000 | 25,990 | 4,588 | 5.200 | 5,290 | 34,900 | 00.550 | |
| Rent | 6.300 | 2,200 | 2,100 | 2,300 | 4,300 | 2,188 | 1,300 | 2.100 | 6,300 | 35,300 | |
| Gapplies | 3,604 | 5.310 | 1.400 | 5,408 | 4,800 | 1,258 | 1,300 | 1.400 | 4,000 | 41,060 | |
| Talaries. | 58,808 | 11,000 | 11:000 | \$2,000 | 91,000 | 12,000 | 11100 | 12,500 | \$1,000 | 101.500 | |
| Weighting | 44,790 | 11,400 | 14,500 | 54,980 | 44,000 | 15,758 | 25,290 | 14,509 | 41,800 | 126,254 | |
| and the owner of the owner of the owner | 2,895 | 100 | 600 | 600 | 1,850 | 000 | 400 | 400 | 1.690 | 1.209 | |
| ENPENDED 7 | BEALING ANTO | 44.270 | 41.300 | 47,000 | 342.479 | 18.226 | 48.300 | 17,800 | 344,010 | | |
| CODES PROP | G2,286 TO | 36,730 | 34,453 | 30,000 | 990,080 | 10.676 | 30400 | 16.153 | 96,420 | 100.005 | |
| · ··· sedar | Charatan / 1 | intern / | 2007-2007 | ni./he | an Zin | NOT N | | | | - | |

| Anger II Anter II Anter II Anter ICEAA Spenceute ant al Goode Destbeing | 15.450 22.448 76.558 5.854 | 15.316 31.040 68.045 1,194 | 272.48 29,208 70,458 | 13.354 41.754 311.364 | 28,538 24,472 76,864 | 16.000 16.000 16.000 | 27.814 24.825 25.534 | 04.180 TL402 | 24.521 | |
|---|---|--|--|---|--|---|--|---|---|--|
| ALES TOFAL Spectrus me al Goode | NEON STREET | 216365 | | | | | | | | |
| openeura ne ol Goode | 5,804 | | 72,458 | 311,356 | 76,064 | 15,400 | 75.0% | 107-112 | 77,264 | |
| nt of Goods | | 1.184 | | | | | | | | |
| | | 1.181 | | | | | | | | |
| t-writeing | | | 6,285 | 11,790 | 4,195 | 6.375 | 6,549 | 16,115 | 6,413 | |
| | 4.808 | 4,400 | 5,488 | 34,900 | 5,250 | 3.775 | 5.5:23 | 36.508 | 5,775 | |
| enti interi | 2,200 | 1,208 | 2,28% | 6,615 | 2,289 | 3,206 | 2,288 | 4,413 | 2,265 | |
| applies . | 8.365 | 1,360 | 5,479 | 4.005 | 5,505 | 1.743 | 1,470 | 4,140 | 3,362 | |
| daries | 16.800 | 26.900 | 17,005 | 907985 | \$2,035 | 12.825 | 17,856 | 51.100 | 17,850 | |
| ipping | 14,983 | 34,458 | 16,205 | 44,625 | 15,798 | 15.125 | 15,468 | 44,465 | 35,756 | |
| and and a second | 115 | 600 | 680 | 1,795 | 210 | 428 | 080 | 1,099 | 080 | |
| PENDLE TUTAL | 18,800 | 41,111 | 48,483 | 310,110 | 10,001 | 48,258 | 10,000 | 147,288 | 10,221 | |
| TODAY ADDA | 20,887 | 38,299 | 24,845 | 76,040 | 27,236 | 12462 | 26.603 | 00208 | 27,941 | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | _ | | - | a) | | | | | |
| | ar les geling the Planet a 1970a Diss Président | artine 15.000 periop 1.4.900 htm 123 miss 123 article Reserve Constant 20.900 html://www.constant constant/ | Sector LA.MID Sector System LA.MID SLA168 Statu LA.MID | wine 15.800 15.000 17.055 wine 14.801 14.468 15.205 wine 13.2 001 400 wines 19.000 100 400 wines 19.000 10.000 10.000 wines 19.000 10.000 20.000 wines 19.000 20.000 20.000 | www. 16.800 12.000 12.005 00000 www. 16.800 16.401 10.202 46.601 www. 16.800 120 600 100 100 www. 16.800 120 600 100 100 100 www. 10.800 10.800 10.800 10.800 10.200 240.600 www. 10.800 10.800 10.800 10.800 11.200 www. 10.800 10.800 10.800 10.800 11.200 | Anne 15.800 17.05 50.05 57.05 symme 14.800 14.020 44.455 15.706 symme 14.800 14.020 44.455 15.706 symme 14.800 10.206 44.455 15.706 symme 14.800 10.206 44.455 15.706 symme 14.800 10.206 44.455 16.706 symme 14.800 10.206 44.455 10.706 symme 14.800 10.206 10.406 10.206 symme 14.900 11.206 20.006 11.206 20.006 symme 14.900 11.206 20.006 11.206 20.006 11.206 20.006 | Anne 15.800 57.005 50.005 57.005 17.005 syming 14.800 14.436 15.205 44.605 10.706 17.015 syming 14.800 14.436 15.205 44.605 10.706 17.125 syming 14.800 10.600 12.015 44.615 10.706 17.125 syming 14.800 10.206 44.615 14.600 20.206 7.0162 syming 14.300 13.100 20.006 71.140 20.206 7.0162 syming 14.300 20.300 20.007 21.0162 20.206 7.0162 | Anne 15.800 57.005 57.005 57.005 17.205 57.005 syming 1.4.901 1.4.406 15.205 4.4625 10.702 17.125 01.406 syming 1.4.901 1.4.406 15.205 4.4625 10.702 17.125 01.406 syming 1.4.901 1.0.206 4.005 1.016 10.702 4.005 0.006 syming 1.0.207 21.206 90.406 11.106 20.206 10.002 30.806 SQL MARTY 20.807 21.206 90.406 11.106 20.206 10.002 30.806 SQL MARTY 20.807 21.206 90.406 11.106 20.206 10.406 30.806 | Anne 16.800 17.05 50.005 17.055 <th 17.055<="" td="" th<=""></th> | |

Select the range you want to use.

Press cm + ^{Page} until you return to the original worksheet.

| | | 1 | e | | M | | a | - | D | · 8 |
|----|-------------|----------------|--------|--------|---------------------|--------|--------|--------|------------|---------|
| | 2nd Gearter | 44 | Aug | Sep | 3rd Buarter | - Que | Ber | Dea | All Guaran | TEEM. |
| | 81.400 | 15.609 | 23,040 | 22,080 | 18.080 | 25,828 | 11.080 | 22,088 | 64.040 | 279.488 |
| | 84,280 | 18,522 | 23,340 | 17.140 | 61,000 | 19,440 | 27,340 | 17.148 | 81,120 | 212,005 |
| | 73.823 | 11,810 | 21,210 | 10,100 | 71,800 | 20,790 | 28.280 | 28,208 | 71.130 | 288,288 |
| - | 2/1/621 | 12,260 | 33,490 | 72,453 | 231,990 | 79,128 | 11,450 | 72,453 | 334,090 | 446.546 |
| | 18.18 | 6.80 | 6.085 | 6.085 | 10.001 | 0.000 | 6.045 | 6.265 | 34,418 | 24.766 |
| | 28,538 | 5,715 | 5,460 | 5.460 | 26.081 | 4,125 | 5,480 | 5,480 | 21.645 | 10.571 |
| | 6,623 | 3,206 | 1,308 | 2,208 | 6,623 | 2.206 | 1,308 | 1,108 | 6,611 | 28,988 |
| | 4,948 | 1.348 | 5,430 | 1.479 | 4,305 | 6.780 | 1,410 | 1,479 | 4,300 | 15,746 |
| | \$3,980 | 12868 | 27,890 | 17.850 | 53,598 | 17.868 | 78,115 | 18.8% | 54,400 | 222,535 |
| | 41,413 | 15,750 | 21,325 | 11,105 | 46,300 | 18,508 | 16,013 | 18,205 | 41,175 | 185,003 |
| 4 | 1,690 | 483 | 400 | 630 | 1,943 | 042 | 409 | 610 | 1.945 | 1,548 |
| | 147,268 | 10.113 | 46,820 | 46,306 | MURI | 49,368 | 10,284 | 49,495 | 201,010 | |
| 6 | 84,254 | 10.60 | 21(5)4 | 31,124 | 34,300 | 29,148 | 33,364 | 22,506 | 34,435 | 396,529 |
| | | | | | | | | | | |
| 8. | | - | | | | | | | | |
| - | · · · | | 4 | | and / inter | a dama | - | | | |
| | 1 13 | and the second | | | a sea of the second | | | | 10 II 10 1 | - |
| - | | | | | | | | _ | | 3 |

- A reference to the range on the other worksheet appears in your formula.
- 5 Type any operands and operators you need to complete your formula.
- 6 Click ✓ or press Enter.

Excel calculates the formula result.

| | 1 | 1 | - K | L . | 44 | - 74 | 0 | | | | 5 | T |
|------|-----------------|---------|---------|----------|-----------------|---------|--------------------|--------------|-------------|----------|--------------|-------|
| | | M | . Aug | leg | Ind Quarter | 041 | Ner | Dee | Ith Quarter | TOTAL | | |
| | Sales | | | | | | | | | | | |
| 1 | Okristen I | Ma | 24,000 | 24,000 | 78,000 | 26,000 | 34,000 | 24,600 | 34,008 | 294,800 | | |
| А. | Ob-Billion B | 6 | 28,500 | 28,302 | 00.000 | 111,000 | 29,500 | 18,900 | 81,008 | IM,NO | | |
| 5 | Obvious M | ALC: NO | 25,290 | 25.250 | 77.500 | 28,000 | 23,254 | 15,230 | 78,509 | 25,8,800 | | |
| 5 | SALES TOTAL | 84,000 | 78,794 | 74,750 | 344,500 | 86,000 | 35,758 | 78,750 | 245,508 | 962,550 | | |
| 7 | Expenses | | | | | | | | | | | |
| ¥. | Case of Goods | 6,729 | 4,360 | 6.900 | 19,306 | 6.680 | 4.300 | 6.300 | 21.448 | 77,864 | | |
| 8 | Advartising | 5,500 | 8,280 | 5.300 | 15.000 | 4,500 | 6,208 | 5,300 | 34,008 | 48,550 | | |
| 10 | Keni | 3,108 | 2,180 | 2,300 | 6,580 | 2,300 | 1,100 | 2,300 | 6,800 | 18,300 | | |
| | Degumes. | 1.309 | 1,000 | 1.409 | 4.180 | 1,390 | 1,308 | 1,400 | 4,000 | 15,890 | | |
| 12 | Saturias | 10.000 | 17,800 | 17,000 | 51,000 | L7,000 | \$7,500 | 17,800 | 52,000 | 201,500 | | |
| 13 | Shipping | 31,000 | \$4,500 | 14,100 | 48,016 | 11,110 | \$5,254 | 14,900 | 41.508 | 176,310 | | |
| 14 | Unitions | 600 | 609 | 600 | 1,850 | 450 | 600 | 400 | 1,850 | 7,206 | | |
| 15 | CHECKNESS TOTAL | 44,178 | 47,550 | 47,900 | \$42,470 | #6,130 | 40.508 | 47,600 | 544,000 | \$53,054 | | |
| 18 | CROKE PROFE | 81,710 | 10,890 | 11,683 | 00,516 | 17,870 | 30,018 | 10,780 | 00,470 | 306,894 | | |
| 2 | | | | _ | | 04 | Numerous Pr | over Land 'V | en's Prodit | 4826-200 | other has | arite |
| 1.01 | | | | | | | | | | | | |
| | THE Robert / No | | A | 7 100 10 | | | | _ | | | \mathbf{V} | |
| | H 2 | | | C 2007 0 | CONTRACTOR OF A | 1000.00 | Contraction of the | | 1.000 | 1 IS 111 | | _ |

You can type a range reference directly into your formula rather than selecting it with your mouse. Type the worksheet name, surrounded by single quotation marks (') if the name contains a space; type an exclamation mark (!); then type the cell or range address. Here is an example: 'Expenses 2010'!B2:B10.

You can reference a range from another workbook. First make sure the workbook you want to reference is open. To add the reference, click the Excel icon (
) in the Windows taskbar and then click the other workbook to switch to it. Click the worksheet that has the range you want to reference and select the range. Click 🔤 and then click the original workbook to switch back to it. Excel adds the reference to the other workbook range to your formula.

MOVE OR COPY A FORMULA

You can restructure or reorganise a worksheet by moving an existing formula to a different part of the worksheet. When you move a formula, Excel preserves the formula's range references.

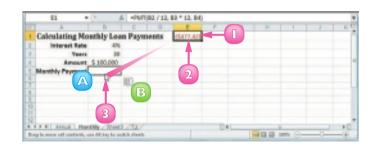
Excel also enables you to make a copy of a formula, which is a useful technique if you require a duplicate of the formula elsewhere or if you require a formula that is similar to an existing formula. When you copy a formula, Excel adjusts the range references to the new location.

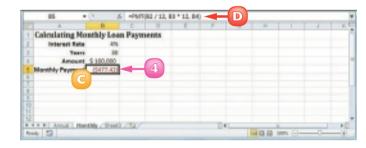
Move a Formula

- Click the cell that contains the formula you want to move.
- Position 🗘 over any outside border of the cell.
 - 🗘 changes to 🐁
- Click and drag the cell to the new location.

k changes to k.

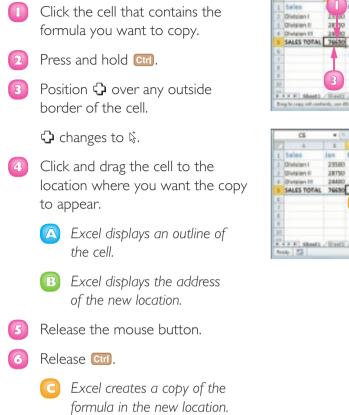
- Excel displays an outline of the cell.
- B Excel displays the address of the new location.
- Release the mouse button.
 - Excel moves the formula to the new location.
 - Excel does not change the formula's range references.





If you do not want Excel to adjust a range reference, switch the reference to the absolute format. Double-click the cell that contains the formula you want to edit, select the cell reference you want to change and then press 2.

Copy a Formula



Excel adjusts the range references.

Note: You can make multiple copies by dragging the bottom-right corner of the cell. Excel fills the adjacent cells with copies of the formula.

STOP Excel assumes that a copy of a formula should reference ranges positioned relative to the ranges used in the original formula. For example, if the original formula references AI and you copy it into the cell to the right, Excel adjusts the cell reference one column to the right, so it becomes B1.



| | | 1 | ć | D | 1 | - 1 | | H | - 1 | 2 | π. | L | - 54 | - 5 |
|----|-------------|-----------|--------|-------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| 1 | Sales | Jan | Feb | Mar | Apr | May | Jun | Ad | Aug | Sep | Oct | Nov | Dec | 10 |
| ł. | Olylsien I | 29580 | 29000 | 24808 | 25300 | 25080 | 25400 | 26808 | 24000 | 34080 | 26000 | 24000 | 24000 | 254 |
| Ē | Division II | 38750 | 27900 | 29500 | 31,000 | 30500 | 30000 | 31000 | 29900 | 29980 | 32000 | 29500 | 29900 | 214 |
| t. | Onlaten III | 38400 | 24900 | 25258 | | 27080 | 26750 | 27908 | 25250 | 25250 | 28000 | 25258 | 25250 | 121 |
| 5 | SALES TOTAL | 76650 | 75200 | | 5 | | | | | | | | | |
| £. | | | (c) | - | $\mathbf{}$ | _ | | | | | | _ | | |
| r. | | | | | | | | | | | | | | |
| ŧ. | | | - | | | | | | | | | | | |
| F. | | | | | | | | | | | | | | |
| Ø. | | | | | | | | | | | | | | |
| | A B Meett | (Bearing) | 100.00 | 1000 | | | | 114 | | | | | | - |

CONTENTS

- 118 Create a New Worksheet
- 120 Move a Worksheet
- I 22 Copy and Rename a Worksheet
- 124 Delete a Worksheet
- Change the Gridline Colour
- 128 Toggle Worksheet Gridlines On and Off
- 129 Toggle Worksheet Headings On and Off

6

MANIPULATING EXCEL WORKSHEETS

An Excel worksheet is where you enter your headings and data and build your formulas. You will spend most of your time in Excel operating within a worksheet, so you need to know how to navigate a worksheet as well as how to perform useful worksheet tasks, such as creating new worksheets and moving, copying, and deleting worksheets. In this chapter, you also learn how to change the gridline colour and how to toggle gridlines and headings on and off.



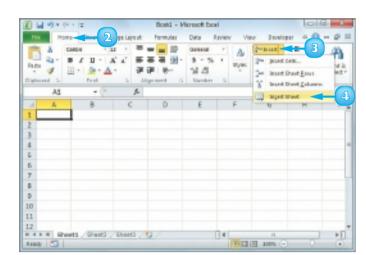
CREATE A NEW WORKSHEET

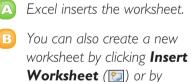
Excel supports multiple worksheets in a single workbook, so you can add as many worksheets as you need for your project or model.

Each new Excel workbook comes with three worksheets but it is not uncommon to require four or more worksheets in a workbook. In most cases, you will add a blank worksheet but Excel also comes with several predefined worksheet templates that you can use. Note that there is no practical limit to the number of worksheets you can add to a workbook.

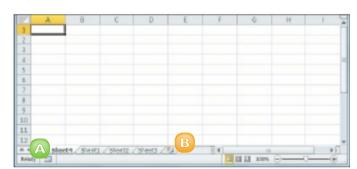
Insert a Blank Worksheet

- Open the workbook to which you want to add the worksheet.
- 2 Click the **Home** tab.
 - Click the **Insert** .
- 4 Click Insert Sheet.





pressing Shift + F11.



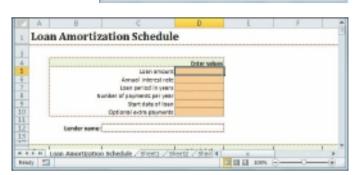


Insert a Worksheet from a

Template

Excel inserts the worksheet.

and I



Press Cttl + Page next worksheet, and Cttl + Page to move to the previous worksheet. You can also click the following controls: 14 to move to the first worksheet, 14 to move to the previous worksheet, 16 to move to the next worksheet and 16 to move to the last worksheet. Loan Amortization Sched

MOVE A WORKSHEET

You can organise an Excel workbook and make it easier to navigate by moving your worksheets to different positions within the workbook.

Although you will most often move a worksheet to a different position within the same workbook, it is also possible to move a worksheet to another workbook.

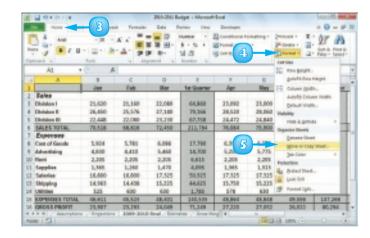
Move a Worksheet Between Workbooks

- If you want to move the worksheet to another workbook, open that workbook and then return to the current workbook.
- 2 Click the tab of the worksheet you want to move.
- 3 Click the **Home** tab.
- 4 Click Format.
- Click Move or Copy Sheet.

The Move or Copy dialog box appears.

Note: You can also right-click the tab and then click **Move or Copy Sheet**.

| 1 A | A | | C | | 1 | 1 | 6 | н | 1 |
|---------|----------------|--------|--------|---------|-----------------------|--------|--------|--------|--------------------|
| 1 | | - Jan | Fab | Ber | fat: Quarter | Apr | May | Jan | 3nd Guerran |
| 5ah | | | | | and the second second | - | | | 1.000 |
| Diele | fore t | 21,620 | 21,180 | 22,080 | 64,960 | 29,092 | 29,008 | 23,968 | 69,663 |
| 1 Die | Asia E | 26,450 | 25,576 | 27,1.00 | 79,146 | 28,920 | 28,060 | 37,600 | 80,380 |
| Distant | Aces BI | 22,448 | 22,080 | 23,250 | 67,758 | 34,472 | 34,840 | 34,610 | 75,822 |
| 5AL | ES TOTAL | 76.558 | 48,854 | 72,450 | 215,794 | 75,084 | 75,908 | 75,578 | 227,542 |
| Exp | 10000 | | | | | | | | the second second |
| Cast. | of Geode | 5,904 | 5,781 | 6,085 | 17,790 | 6,810 | 6,276 | 6,349 | 39,315 |
| Adve | entition | 4,830 | 4,410 | 5,460 | 14,700 | 5,250 | 5,775 | 5,513 | 36,518 |
| D Rent | | 2,295 | 2,395 | 2,305 | 6,615 | 2,205 | 2,208 | 2,205 | 6.435 |
| I. Swpe | dies | 1,145 | 1,260 | 1.470 | 4,095 | 1,965 | 1.313 | 1,479 | 4.545 |
| 2 Sala | rice | 16,000 | 16,000 | (2) | 50,925 | 17,325 | 17,325 | 17,850 | \$2,500 |
| 3 SNIp | ping | 14,963 | 14,408 | 4 | 44,625 | 15,758 | 15,315 | 15,488 | 46,463 |
| A LARK | les | 1215 | 630 | dab . | 1,785 | 178 | 400 | 683 | 1,890 |
| 15 EXP1 | ENVIREN FORTAM | 48,651 | 45,523 | 4 401 | 140,505 | 48,864 | 48,848 | 49,558 | 547,368 |
| | 6.5 PROFIT | 28,967 | 29,293 | 2,049 | 71,349 | 27,229 | 27,052 | 36,622 | 80,294 |



- 7 Use the Before sheet list to click a destination worksheet.

The worksheet will appear to the left of the sheet you select in Step **7**.

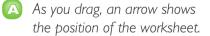
8 Click OK.

Excel moves the worksheet.

Move a Worksheet Within the Same Workbook

- Move ▷ over the tab of the worksheet you want to move.
- 2 Click and drag the worksheet tab left or right to the new position within the workbook.

 $\$ changes to $\$.

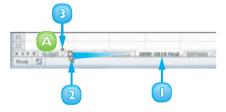


3 When you have the worksheet positioned where you want it, drop the worksheet tab.

Excel moves the worksheet.



| | A | | c | 0 | | 1. | - 0 | | |
|-----|----------------|--------|--------|---------|-------------|--------|--------|--------|-------------|
| 1 | | Jan | Fab | Ber | fat Guerter | Apr | Mag | - Jan | 2nd Quarter |
| 2 | Sales | | | | 1 | | | | 10000 |
| 3. | Oblighton I | 21,620 | 21,180 | 22,080 | 64,890 | 28,092 | 23,080 | 23,368 | 68,460 |
| t. | Division II | 26,550 | 25,576 | 27,1.00 | 76,266 | 28,830 | 28,060 | 27,680 | 84,180 |
| 5 | Disisten III | 22,448 | 22,080 | 23,250 | 67,718 | 24,472 | 24,840 | 24,650 | 73,923 |
| 6. | SALES TOTAL | 76.558 | 58,555 | 72,450 | 211,784 | 76.084 | 75,980 | 75.578 | 227,562 |
| 7 | Expenses | | | | | | | | |
| я. | Cast of Geody | 5,924 | 5,781 | 6,086 | 17,790 | 6,391 | 6,276 | 6,1/09 | 18,115 |
| | Advertising | 4,890 | 4,410 | 5,460 | 54,700 | 5,250 | 5,775 | 5,503 | 16,538 |
| 10 | Fami | 2,295 | 2,395 | 2,305 | 6.635 | 2,295 | 2,295 | 2,295 | 6,615 |
| | Supplies | 1,345 | 5,250 | 8,479 | 4.095 | 3,385 | 5,353 | 5,470 | 4,148 |
| 12 | Salarios | 16,000 | 16,000 | 17,325 | 50.525 | 17,325 | 17,525 | 17,650 | 52,580 |
| 12 | shipping | 14,963 | 14,408 | 15,225 | 44,625 | 15,790 | 15,225 | 15,488 | 46,463 |
| 14 | Littles | 121 | 630 | 680 | 1,785 | 578 | 430 | 68.2 | 1,890 |
| 15. | EXPENSES TOTAL | 48,651 | 45,523 | 48,401 | 140,535 | 48.864 | 46,848 | 49,556 | 141,268 |
| 18. | GROSS PROFIT | 23.967 | 23,293 | 24,049 | 71,249 | 21,230 | 27.052 | 26,023 | 88,294 |





COPY AND RENAME A WORKSHEET

Excel enables you to make a copy of a worksheet, which is a useful technique if you require a new worksheet that is similar to an existing worksheet. Rather than re-creating the new worksheet from scratch, you can make a copy of an existing worksheet and then edit the copy as needed.

Although you will most often copy a worksheet within the same workbook, it is also possible to copy the worksheet to another workbook.

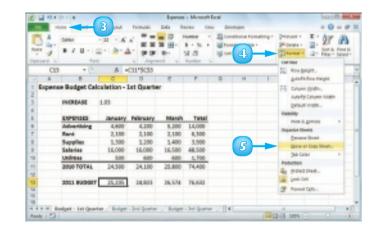
Copy a Worksheet

- If you want to copy the worksheet to another workbook, open that workbook and then return to the current workbook.
- 2 Click the tab of the worksheet you want to copy.
- Click the Home tab.
- Click Format.
- Click Move or Copy Sheet.

The Move or Copy dialog box appears.

Note: You can also right-click the tab and then click **Move or Copy Sheet**.

| 1 | A 8 | G | 9 | - E - I | P | 6 | 12 | 1 | 1 | - FG - 1 | 5 | T |
|-----|------------------|-----------------|------------|---------|--------|------|----|---|-----------|----------|---|---|
| 1 | Expense Budge | t Celculation - | Let Quarte | er i i | | | | | | | | |
| 츿 | INERSAS | 6 1.03 | | | | | | | | | | |
| 5 | erenaria. | | | | | | | | | | | |
| 2 | EXPENSI | El January | February | Marsh | Total | | | | | | | |
| 1 | Advention | Ang 4,600 | 4,280 | 5.280 | 14,080 | | | | | | | |
| | Rent | 2,180 | 2,180 | 2,180 | 6,380 | | | | | | | |
| E | Supplier | 1,500 | 1,280 | 1,400 | 3.980 | | | | | | | |
| ٤. | Selaties | 16,080 | 16,080 | \$6,580 | 48.580 | | | | | | | |
| 2 | Unifician | 500 | 680 | 680 | 1,700 | | | | | | | |
| 1 | 3010 | 2 24,580 | 24,180 | 25,880 | 74,480 | | | | | | | |
| 1 | 3011 80 | 26,295 | 24,828 | 26,874 | 76,603 | | | | | | | |
| | | | | | | | | | | | | |
| | a al matget - 14 | quarter / WHICH | 78483 /3 | 2/ | | - 84 | | _ | | | | į |
| in. | A 53 | | | | | | | | E 10% (C) | | | |



- 6 If you want to copy the sheet to another workbook. click the **To book** and then click the workbook.
- Use the Before sheet list to click a 7 destination worksheet.

The copy will appear to the left of the sheet you select in Step 7.

- 8 Click the **Create a copy** check box (\square changes to \blacksquare).
- Click **OK**. 9

Excel copies the worksheet.

🔼 Excel gives the new worksheet the same name as the original, but with (2) appended.

Rename a Worksheet

- Display the worksheet you want to rename.
- Click the **Home** tab. 2
- 3 Click Format.

4 Click Rename Sheet.

> Excel opens the worksheet name for editing and selects the text.

Note: You can also double-click the worksheet's tab.

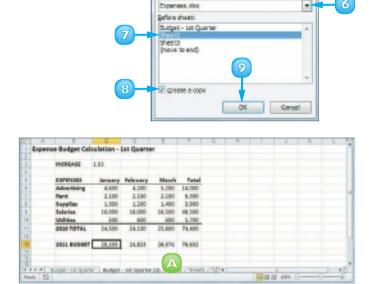
5 If you want to edit the existing name, press 🖸 or 🔁 to deselect the text.



Type the new worksheet name.



Excel assigns the new name to the worksheet.



Move or Copy

Expenses size

To book:

Move selected sheets

2 X

| National of | | 10 000 10 000 1 000 10 000 1 000 | S · She | | Colling - Densit - E - AF A |
|-------------|---|--|------------|------|-----------------------------|
| .43 | the second se | | | | 2. Rev Bright . |
| | | C | D | 1 | P galafit Row Harper |
| 2 | Lains Rep. | 2008 Salas | 3010 Bales | | 75 Course girth. |
| 3 | Nancy Rephater | \$1996,336 | 5960,402 | | Autority Column Watth |
| 4 | Andrew Cencini | \$406,755 | \$577,983 | | Delang Angel |
| | Jan Kelles | \$622.782 | \$867,580 | | Vublity |
| 6 | Mariya Sergianko | \$765,327 | \$775,399 | | Hole & Buside |
| 7 | Staves Thorpe | \$863,588 | 5827,253 | 0 | Organize Shorts |
| | Michael Neigeer | \$795,518 | \$668,394 | (4)- | Earlies Sheet |
| | Robert Zare | \$722,740 | \$828,945 | - | Mane at Dagy Dead |
| 50 | Lears Glusseni | \$892,058 | 5574,472 | | \$40-Exist + |
| 11 | Anne Hellung-Larsen | \$459,348 | \$817,903 | | Analogian |
| 12 | Nysa Harper | \$509,623 | \$568,629 | | By Donard Stage |
| 10 | David Reny | \$987,777 | \$258,601 | | Los Cel |
| 24 | Paul Voyatzia | \$485,091 | 5692,182 | | Parend Lyla- |
| 22 | Andrea Aster | \$540,484 | \$690,762 | | |
| 28 | Charles Granek | \$450,738 | \$828,084 | | |
| 17 | Karen Allaton | \$589.863 | 5511.549 | | |
| 28 | Karee Harrysond | \$585,699 | \$875,455 | | |
| 29 | Vince Durlate | \$680,368 | \$599,554 | | |
| 20 | Paul Richardson | \$279,722 | 5098,553 | | |
| 21 | Greeg O'Donoghue | \$582,802 | 5852.171 | | |

CHAPTER 6 MANIPULATING EXCEL WORKSHEETS

DELETE A WORKSHEET

If you have a worksheet that you no longer need, you can delete it from the workbook. This reduces the size of the workbook, reduces clutter in the worksheet tabs, and makes the workbook easier to navigate.

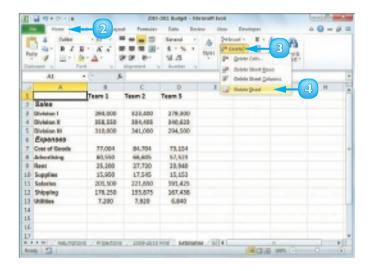
It is important to note that you cannot undo a worksheet deletion. Therefore, it is always a good practice to check the worksheet contents carefully before proceeding with the deletion. If the worksheet contains any data you need but you still want to remove the worksheet, cut or copy the data and paste it into another worksheet.

Click the tab of the worksheet you want to delete.

| | A. | Û. | C | D | E | F | G | 11. | 1 | 1 |
|-----|-----------------|-----------|-------------|-----------|----------------|------------|---------|---------|-------------|---|
| 5 | | (Inc. | Feb | Mar | ist Quarter | Apr | May | Jun | 2nd Quarter | ł |
| 2 | Sales | | | | | | | | | I |
| 1 | Disision I | 23,580 | 23,000 | 24,000 | 20,500 | 25,500 | 25,000 | 25,480 | 75,500 | ł |
| 4 | Division II | 28,750 | 27,800 | 29,500 | 86,052 | 35,000 | 90,500 | 90,000 | 91,500 | |
| 5 | Division III | 24,400 | 24.000 | 25.250 | 73,650 | 25,500 | 27,000 | 26,750 | 80,350 | |
| i. | SALES TOTAL | 76,650 | 74,800 | 78,750 | 250.200 | 82,700 | 82,500 | 82.150 | 247.350 | |
| 7 | Expenses | | | | | | | | | |
| £ | Cast of Goods | 6.332 | 5,984 | 6,300 | 38.416 | 6.636 | 6.680 | 6.572 | 19,788 | |
| 5 | Advertising | 4.800 | 4,200 | 5.200 | 34,000 | 5.000 | 5,580 | 5.250 | 15,750 | |
| ø | Bant | 2.300 | 2,500 | 2,100 | 6,300 | 2,100 | 2.100 | 2.300 | 6,300 | |
| 1 | Supplies. | 1,300 | 1,200 | 1,408 | 3,900 | 1,300 | 1,250 | 1,400 | 3,950 | |
| 2 | Salaries | 16,000 | 16,000 | 16,500 | 48,500 | 16,500 | 36,500 | 17,000 | 50,000 | |
| 8 | Shipping | 14,190 | 18,750 | 14,800 | 42,500 | (000 | 34,500 | 14,790 | 44,250 | |
| 4 | Differs | 500 | 600 | 600 | 1,700 | 60 | 680 | 650 | 1,800 | |
| 5 | EXPENSES TOTAL | 44,882 | 43,894 | 46,600 | 116.316 | 47,066 | 47,058 | 47,722 | 141,838 | |
| ĥ | GROSS PROFIT | 31,768 | 30,866 | 32,550 | 54,884 | 35,634 | 35,450 | 34,438 | 385,512 | l |
| T | | | | | | | | | | 1 |
| 1 | F H Bedget / An | unphone / | Projections | / 2019-23 | ob Prel / Extr | inter_2114 | | | | ł |
| 188 | iar 🗂 | | | | | | 1 1 1 1 | 00% (G) | 0 3 | ł |

- 2 Click the **Home** tab.
- ₃ Click the **Delete** 🗔.
- Click Delete Sheet.

Note: You can also right-click the tab and then click **Delete Sheet**.



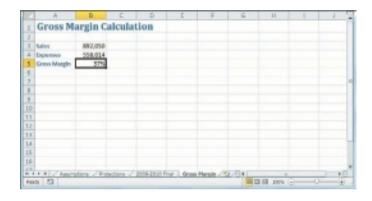
If the worksheet contains data, Excel asks you to confirm that you want to delete the worksheet.

| Mercall | Office Exer | |
|---------|--|----------------------------|
| ٠ | beta merekit in the sheets) and call for delaters. To anymere to del | ets the data, presidentia. |



5

Excel removes the worksheet.



 \square

You can delete several worksheets at once. Click the tab of one of the worksheets, hold down cm and click the tabs of the other worksheets. Then follow Steps 3 to 5 to delete all the worksheets.



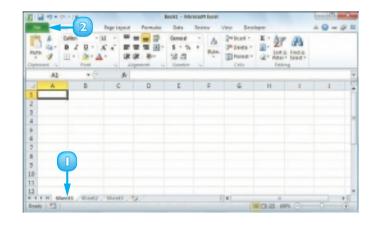
To remove the grouping of the worksheets, right-click any worksheet tab and then click Ungroup Sheets. If you want to delete most of the worksheets, right-click any worksheet tab and click Select All Sheets. Hold down Cm and then click the tabs of the worksheets that you do not want to delete to deselect them.

CHANGE THE GRIDLINE COLOUR

You can add some visual interest to your worksheet by changing the colour that Excel uses to display the gridlines. The default colour is black, but Excel offers a palette of 56 colours that you can choose from.

Changing the gridline colour also has practical value because it enables you to differentiate between the gridlines and the borders that you add to a range or a table.

- Click the tab of the worksheet you want to customise.
 - Click the **File** tab.



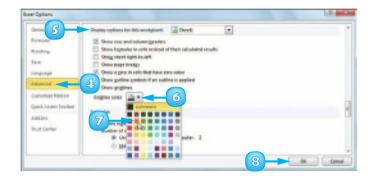
3 Click Options.

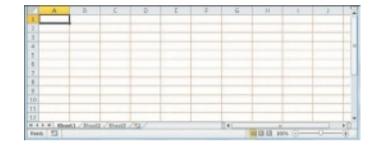


The Excel Options dialog box appears.

- Click Advanced.
- 5 Scroll down to the Display options for this worksheet section.
- 🜀 Click the **Gridline color** 🗔.
- 7 Click the colour you want to use.
- Click OK.

Excel displays the gridlines using the colour you selected.





 \checkmark

To change the gridline colour for all the sheets in a workbook, right-click any worksheet tab and then click Select All Sheets. You can then follow Steps 2 to 8 to apply the new gridline colour to all your worksheets.



To remove the grouping of the worksheets, right-click any worksheet tab and then click Ungroup Sheets.

TOGGLE WORKSHEET GRIDLINES ON AND OFF

You can make your worksheet look cleaner and the text easier to read by turning off the sheet gridlines. When you do this, Excel displays the worksheet with a plain white background. If you find you have trouble selecting ranges with the gridlines turned off, you can easily turn them back on again.

- Click the tab of the worksheet you want to work with.
- 2 Click the **View** tab.
- Click Gridlines (changes to).

| | | : Historiah Dool | | | |
|---|-----------------------------------|------------------------|------------|---------|-------------|
| in Home Intel Reprinted Forma | | 1 100 | 2 | | |
| | inedings Ison | 1004 Jacob Internition | Arange All | - I I - | ter Britter |
| 109 - 5 | | | | Wedler | |
| D 0 4 | 0 | 1 | F | G H | 1 1 1 |
| 123-85th Secent Herw York, N.X. 10819 Taskil Tor Margin | Invoice Reminent Invoice Basic | | 1 | | |
| | | | | | |
| Quantity Description | Pèce | Extension | | | |
| Onestity Description | Price | Extension | | | |
| Chantly Description | Suttona Ten Total | | | | |

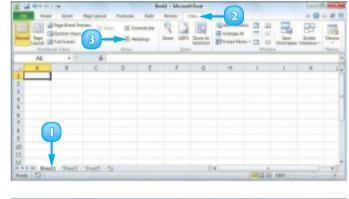
- Excel turns off the gridline display.
- B To turn the gridlines back on, click Gridlines (□ changes to ☑).

| 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Briman Incole | e : Hiseah Dod | | 1000 (40) and |
|---|----------------|----------------|---|----------------|
| tone local Reprinted Format | | a yes because | | |
| And | imagings Incom | | a filmboo III III III III III III IIII IIII I | Gontale - Har |
| 109 · · · 5 | 0 | | 6 N | 1 1 1 |
| Brimson Manufacturing | | INVOICE | | |
| GI-48th Steent | Involce Number | | | |
| Here York, N.Y. 19979 | Involce there | | | |
| Table Ton Map 1 | | | | |
| | | | | |
| | | | | |
| Quantity Description | Price | Extension | | - |
| | | | | |
| | | | | A |
| 2 | | | | A |
| 2 | | | | A |
| | Sumou | | | A |
| | 1.00 | | | A |
| | | | | A |
| | Total | | | A |

TOGGLE WORKSHEET HEADINGS ON AND OFF

You can give yourself a bit more room to work by turning off the worksheet's row headings – the numbers 1, 2, and so on to the left of the worksheet – and column headings – the letters A, B, and so on above the worksheet. If you find you have trouble reading your worksheet or building formulas with the headings turned off, you can easily turn them back on again.

- Click the tab of the worksheet you want to work with.
- 2 Click the **View** tab.
- 3 Click Headings (changes to □).
 - A Excel turns off the headings.
 - B To turn the headings back on, click **Headings** (changes to).



| C C C C C C C C C C C C C C C C C C C | 1 | uki : Mcroot/bed | | 10-10-1 |
|---------------------------------------|----------------------------|---------------------------------|----------------|-----------------------------|
| Home boat Reprinted | Formulas | Review View Dr. | weight . | |
| | B temate for the strong | Con 1001 Same in Second Same | Carange Al III | Der Golde Norigen Holden |
| A A | | | | |
| A | | | | |
| n a n n Seetl / Sectl / Sectl / | | | | |

CONTENTS

- I32 Create a New Blank Workbook
- I34 Create a NewWorkbook from aTemplate
- Save a Workbook
- 137 Open a Workbook
- Arrange WorkbookWindows
- I 40 Find and Replace Text in a Workbook
- 142 Modify Workbook Colours
- I 44 Set Workbook Fonts
- 146 Choose Workbook Effects
- 148 Apply a Workbook Theme

DEALING WITH EXCEL WORKBOOKS

Everything you do in Excel takes place within a *workbook*, which is a standard Excel file. This chapter shows you how to get more out of workbooks by creating new workbooks, either blank or from a template; saving and opening workbooks; arranging workbooks within the Excel window; finding and replacing text within a workbook; and modifying the look of a workbook.



CREATE A NEW BLANK WORKBOOK

To perform new work in Excel, you need to first create a new, blank Excel workbook. Excel automatically creates a blank workbook each time you start the program, but for subsequent files you must create a new workbook yourself.

If you prefer to create a workbook based on one of Excel's templates, see "Create a New Workbook from a Template."

CELLA REPORTE

Click the **File** tab.

| A1 + (-) A A B C D F G H I J 2 Tible Vesr Director J Allen I J 3 Allen 1679 Ridley Scott I Allen I J 4 An Angel from Texes 1590 Ret English I I I I 6 Big Diskap Scott I | | 2- Mar- | Printer - Printer - Deter - Cett | | El Conditional Formating * Promatias Dable * Coll Spiles * 2010 | | Serect - | | | - | Pada Outo |
|---|----|---------|---|---|--|----|---------------|--------|-----------------------------|----|--------------|
| Itele Year Director 3 Allee 1959 Ridey Scott 4 An Angel from Texas 1940 Res Enright 6 Big 1980 Resp Marshall 6 Texas 1940 Res Enright 7 Blade Rummer 1982 Ridey Scott 8 Alleen 1992 Ridey Scott 8 Alleen Scott 1982 Ridey Scott 9 Alleen Carol 1981 Brian Hundt 9 Alleen Carol 1991 Stanty Kubrick 10 He Hard 1991 Stanty Kubrick 11 Die Hard 1991 Stanty Kubrick 12 Did Invaldes 1900 Jemes Orae 13 Alleen Statt 1900 Jemes Orae 14 Allerisch World 1993 Cim Europed | | | | | | | | | + (* A | A1 | |
| Altern 1070 Ridley Scott 4 An Angel from Taxes 1540 Reg Entight 6 Rig 1580 Reg Entight 6 The Rig Steep 1580 Reg Entight 7 Biade Burnner 1582 Ridley Scott 8 A Christmes Corol 1591 Steen Hunzt 9 Christmes Corol 1591 Steen Hunzt 9 Christmes In July 1580 Persten Steeps 10 A Clockweit Orange 1591 Steen Hunzt 11 Die Hard 1591 Steen Hunzt 12 Die Hard 1591 Steen Hunzt 13 Die Hard 1590 Jeness Oran 14 A Perfect World 1590 Jeness Oran 15 A Fold Staetsk Custern 1596 Jeness Oran 14 A Perfect World 1590 Jeness Oran | | 1 | H I | | ő. | 4 | Ð | C | | A | 1 |
| 4 An Angel from Texas 1580 Res Enright 6 Nig 1588 Penny Marshall 6 Tite Nig Steap 1588 Penny Marshall 7 Blade Burner 1592 Hidley Scott 8 A Christmas Carol 1591 Shan Hunt 9 Christmas In July 1580 Penny Nacksall 10 A Christmas Carol 1591 Shan Hunt 11 Die Hard 1591 Shan Hunt 12 Olid Inmahles 1590 James Onse 13 A Christmas In July 1580 James Onse 14 A Perfect World 1590 James Texas | | | | | | | Irector | lear I | Title | _ | 2 |
| Ng 1988 Persy Marshall 6 The lig Steap 1988 Persy Marshall 6 The lig Steap 1988 Neuror Haude 7 Blade Runner 1982 Hilling Scott 8 A Christmas Carol 1951 Brian Hant 9 Christmas Carol 1951 Brian Hant 9 Christmas Lin July 1980 Persine Stages 10 A Clockwark Change 1991 Stanley Gubrick 11 Die Hand 1991 Jaanie Michaeman 12 Old Ispanisk Custere 1950 James Ones 13 An Old Spanisk Custere 1986 Adrian Brunel 14 A Perfect Wardi 1980 Clint Eastward | | | | | | | diey Scott | 1979 8 | Alen | | 3 |
| 8 The Big Sleep 15846 Harvard Havels 7 Biado Burner 1582 Hilling Scott 8 A Christmas Corol 1593 Brian Humt 9 Christmas In July 15800 Persten Stugers 10 A Clockweit Orange 1591 Staniky Kubrick 11 Die Hard 1591 Jaaniky Kubrick 12 Diil Invasilies 1592 James Oran 13 Ar Old Spanish Custern 1595 James Oran 14 A Perfect World 1590 Cim Extraord | | | | | | | u Enright | 1940 0 | An Angel from Texes | | 4 |
| 7 Blade Rummer 1582-Ridley Scott 8 A. Christmas Canol 1551. Brian Humt 9 Christmas In July 1580. Phenter Stages 10 A. Clockwark Change 1591. State Humt 11 Die Hard 1591. Jahren McTeeman 12 Olid Inmahles 1590. James Cruse 13 A. Old Spanish Custem 1590. James Cruse 14 A. Perfect World 1590. Cim Earward | | | | | | | nny Marshall | 1988 / | Rig . | | 6. |
| 8 A Christmas Carol 1551 Srian Hant 9 Christmas In July 1580 Proclam Stugets 10 A Clockwark Change 1591 Janiley Gubrick 11 Die Hand 1591 Jahn McTheman 12 Die Hand 1593 Jahn McTheman 13 An Old Spanish Custere 1596 Adram Strange 14 A Perfect Ward 1598 John McThemal | | | | | | | ruard Havins | 1546 1 | The Big Seep | | 6 |
| % Christenas In July 1980 Presten Stuges 10 A Clockweit Orange 1071 Stanley Kubrick 11 Die Hard 1991 Jahr McTierenan 12 Die Hard 1992 Jahr McTierenan 13 Die Stanisk Custern 1980 Anne Groep 14 Ar Old Spanisk Custern 1986 Anten Normal 14 Arefrict World 1990 Cim Extraord | | | | | | | dieg Scott | 1962 0 | Blade Ranner | | 7 |
| 10 A Clockwark Ovange 1071 Stanley Bubrick 11 Die Hand 1591 Juhn McTieman 12 Old Investies 1590 Anmed Oruse 19 An Old Spanish Custom 1996 Adelan Strund 14 A Perfect World 1996 Onter Langed | | | | | | | lan Hurst | 1951.8 | A Christmas Carol | | 8 |
| II Die Hand I991 John McTieman Old Issenisk Gusten I990 James Grues An Old Spanisk Gusten I996 Adrian Strand Johnson | | | | | | | esten Sturges | 1940 8 | Christmas In July | | 8 |
| Olid Investides 1950 James Oven An Old Spanish Custers 1996 Advant Normal A Perfect World 1990 Otto Estudio | | | | | | | anley Kubrick | 1971 1 | A Clockwark Orange | | 10 |
| 19 An Old Spanish Custers 1986 Advian Brunal A Perfect World 1993 Clint Eastwood | | | | | | | In McTieman | 1991.1 | Die Hard | | 11 |
| 14 A Perfect World 1993 Clint Eastwood | | | | | | | mes Onen | 1926 / | Old ironaldes | | 12 |
| | | | | | | | kian Brunel | 1996/ | An Old Spanish Custom | | 18 |
| | | | | | | | int Eastwood | | | | 14 |
| NATION CONTRACTOR CONTRACTOR | +E | | | _ | | 04 | | (t) | ovie List / Sheet2 / Sheet2 | | |

Click New.



3 Click Blank Workbook.

Click **Create**.

Note: You can also create a workbook by pressing **Ctrl** + **N**.



Excel creates the blank workbook and displays it in the Excel window.

| 2149- | (0) × 28 | | | | Book2 + M | lees | aft Excel | | | Co il | 100 |
|-------------|--------------------|-------|-----------|-------------|-----------------------------------|------|--------------|---|--|--|-----|
| 100 | iona I | teet. | Page Like | at formular | 0.018 | - | 100 1000 | | | | |
| - | 0.00 B / E · | × - | H | | Server S - % M 23 Hanter | - | Con Styles * | | Printer * Printer * Denter * Denter * Denter | K · ZI · ZI · Lat A · Anter · Anter | |
| A | 1 | | | 5 | | | | | | | |
| 1 A | - | 8 | c | D | • | | 0 | н | 1 | 1 | 8 |
| 3 8 9 | | | | | | | | | | | |

33



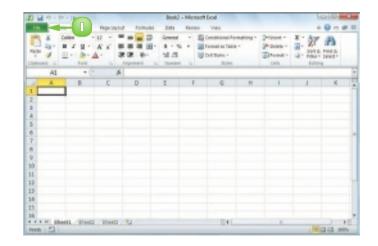
If you open an existing file without changing a blank workbook, Excel assumes you do not want to use the new workbook and closes it. To prevent this from happening, make a change to the blank workbook before opening any existing file.

CREATE A NEW WORKBOOK FROM A TEMPLATE

You can save time and effort by creating a new workbook based on one of Excel's template files. Each template includes a working spreadsheet model that includes predefined labels and formulas, as well as preformatted colours, fonts, styles, and more.

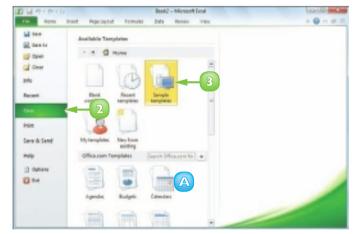
Excel 2010 offers seven templates, including Expense Report, Loan Amortization, and Personal Monthly Budget. However, there are many more templates available through Microsoft Office Online.

Click the **File** tab.



Click New.

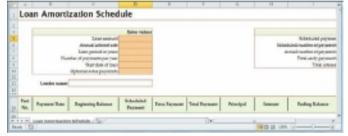
- Click Sample templates.
 - To use an Office Online template, click a category in the Office.com Templates section. Click the template you want to use and then click **Download**



- Click the template you want to use.
 - A preview of the template appears here.
- Click Create.

Excel creates the new workbook and displays it in the Excel window.







If you have a specific workbook structure that you use frequently, you should save it as a template. Open the workbook, click File and then click Save As. In the Save As dialog box, click the Save as type ⊡ and then click Excel Template. Type a file name and then click Save. To use the template, click File, click New, and then click My Templates.

You can create a new workbook based on an existing workbook. Click File, click New, and then click New from Existing. In the New from Existing Workbook dialog box, click the existing workbook and then click Open.

SAVE A WORKBOOK

After you create a workbook in Excel and make changes to it, you can save the document to preserve your work.

When you edit a workbook, Excel stores the changes in your computer's memory, which is erased each time you shut down your computer. Saving the document preserves your changes on your computer's hard drive so, to avoid losing your work, you should save a workbook as often as is practical.

- Click the **File** tab.
- Click **Save** (😡).

Note: You can also click **I** in the Quick Access Toolbar or press **Ctrl** + **S**.

If you have saved the document previously, your changes are now preserved and you can skip the rest of these steps.

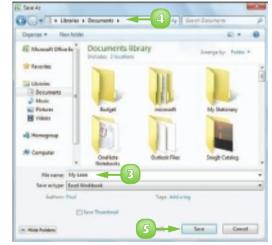
If this is a new document that you have never saved before, the Save dialog box appears.

- 3 Click in the **File name** text box and type the name that you want to use for the document.
- Select a folder in which to store the file.
 - Click **Save**.

Excel saves the file.

Note: To learn how to save a workbook in an older Excel format, see Chapter 10.





OPEN A WORKBOOK

To view or make changes to an Excel workbook that you have saved in the past, you can open the workbook in Excel.

If you have used the workbook recently, you can save time by opening the workbook from Excel's Recent menu, which displays the most recent 22 files you worked with in Excel.



You can click **Recent** to see a list of your recently used workbooks. If you see the file you want, click it and then skip the rest of these steps.

Click Open ().

Note: You can also press **Ctrl**+**O**.



The Open dialog box appears.

- 3 Select the folder that contains the workbook you want to open.
- 4 Click the workbook.
- Click **Open**.

The workbook appears in a window.



ARRANGE WORKBOOK WINDOWS

You can view two or more workbooks at once by arranging the workbook windows within the main Excel window. This enables you to easily compare the contents of the workbooks. Arranging workbook windows also enables you to more easily copy or move data among workbooks.

Excel offers four view modes for arranging workbook windows: Tiled, Horizontal, Vertical, and Cascade.

- Open the workbooks you want to view.
- Click the **View** tab.

| | | 10 - 11 - | | ili famili | 2 | - | Post- Post- Dist | | . 21 | A |
|---|-------|-----------|--------|------------|---|-----|------------------------|---|------|---|
| A A | 8 | | c | 0 | 1 | | | G | | |
| 1 Product Name | Units | 51 | leta | | | | | _ | | |
| 2 Northaled Taskys Meansh. | 20 | | 300 | | | | | | | |
| 3 Northaled Teaders Beer | 457 | | 6,630 | | | | | | | |
| 4 Porthaind Insders Bayanderry Speed | 100 | 5 | 2,900 | | | | | | | |
| 5 Plottheand Tables Calus Leavening | 40 | 8 | 880 | | | | | | | |
| 6 Porthesind Teaders Chai | 40 | 8 | 730 | | | | | | | |
| 7 Northaird Isaders Chooslate | 300 | 5 | 2,890 | | | | | | | |
| 8 Northealed Feeders Chocolute Blacalta Mix | 45 | \$ | 782 | | | | | | | |
| 9 Northaled Rades Clan-Chouder | 290 | 5 | 2,799 | | | | | | | |
| 50 Rotheled Trades Caffee | 680 | | 28,800 | | | | | | | |
| 11 Peorthouted Tasders-Cally Meal | 130 | _ | 2,308 | | | | | | | |
| 12 Northeand Teaders Carry Sauce | 桥 | 5 | 2,400 | | | | | | | |
| 13 Northeand Traders Dried Apples | -40 | 5 | 2,120 | | | | | | | |
| 24 Porthesind Traders Online Pears | 40 | | 1,300 | | | | | | | |
| 28 Northwind Trades Orled Plane. | 79 | | 368 | | | | | | | |
| 56 Northaled Teaders Inalit Cosktall | 40 | | 1,960 | | | | | | | - |
| Fail and Anna Band Band . To | | - | | 840 | | 100 | 10.105 | | | 1 |



The Arrange Windows dialog box appears.

| I G OFFICE | Peolout | Lales x 116 | weath Basel | | | | 0-8 | 1.0 |
|--|------------|-------------|-------------|---|---------|--------------|-----|-------|
| The Maria Joant Reprintant Pares | ulas Catio | Inter | Vire | | | | +0. | |
| Nermer Transformer Regel States Regel States Regel States | 3 | 1000 | | | Sala | 1000 1000 | | |
| M19 * A | | | | | | | | 1 |
| A 10 | 8 | ç | | 8 | 1 | G | | 1 1 |
| 1 Product Name | Units | 5 Tet | bl . | | | | | |
| 2 Northaled Taskys Meansh | 20 | 5 3 | 300 | | | | | |
| 3 Rothalind Reders Beer | 467 | 5 10 | 660 | | | | | |
| 4 Northwind feaders insyanderry (geoal | 100 | 5 23 | 900 | | | | | |
| 5 Plottheand Teaders Cajus teasoning | 40 | \$ 1 | 880 | | | | | |
| 8 Porthedred Traders Chal | 40 | 8 | 130 | | | | | |
| 7 Hosthaird Isaders Chocolate | 300 | 5 2/ | 190 | | | | | |
| # Horthealed Fraders Chocolute Blacalta Mix | 65 | 5 | 182 | | | | | |
| Northwind Traders Clam-Chowder | 290 | 5 2. | 199 | | | | | |
| 50 Rotheated Traders Caffee | 480 | 8 20/ | 800 | | | | | |
| 11 Northward Teaders Calls Mead | 120 | 5 3, | 308 | | | | | |
| 12 Northeand Teaders Carry Sauce | 桥 | \$ 2/ | 600 | | | | | |
| 23 Northwind Traders Orled Apples | 40 | 5 2. | 130 | | | | | |
| 58 Plottheated traders three Pears | 40 | 8 10 | 200 | | | | | |
| 28 Northward Traders Orled Plane. | 79 | | 248 | | | | | |
| 55 Northaled Teaders Italit Cosktall | 40 | | 990 | | | | | |
| WARM date, Deard, Bastl, 12 | 10 | | 141 | | | | | 110 |
| Reads 12 | | | | | - G C = | 00% (E) | | - (4) |

4 Click a view mode (◎ changes to ●):

Tiled arranges the workbooks evenly within the Excel window.

Horizontal stacks the workbooks one above the other.

Vertical displays the workbooks side by side.

Cascade arranges the workbooks in an overlapping pattern.

Click **OK**. 5

Excel arranges the workbook windows.

This example shows two workbooks arranged with the Horizontal view mode.



| | | Finders Boyneetberty typened Finders Cajan Sourceing | 40 | 1 | 2,500 | | | | | |
|----|--------------------------|---|----|-----------|-------------|----------------|----------------|-----------------|-----------------|-----------------|
| | P H Sales | /David / David / G | | | 0 | | | | | *B- |
| 1 | ning. | | | | | | | | | |
| | A. | B | | | 0 | D | 2 | P | 0 | |
| + | Preduct | Product Name | | Pr | nahart Coda | Qty-Ba Bald | Qty On Hand | Qy Available | Q19 On Dedar | Bounds Level |
| 1 | 1 | Northurind Tradees Chail | | NW | TB-1 | 25 | 35 | Ó | 45 | - |
| 2 | 1 | Marthurind Tradiers Symp | | NA | TCD-3 | 0 | 50 | 50 | 50 | |
| 4 | 4 | Northurind Traders Cajan Seasoning | | 200 | T00-4 | 0 | 0 | 0 | 40 | |
| 5. | 5 H 11 11 11 11 11 11 11 | Northwind Traders Olive Oil | | 716 | TD-5 | 0 | 15 | 25 | | |

S Total

7



To see only one workbook, click the workbook you want to use and then click the workbook window's Maximize button (I). Excel maximises all the open workbooks but you only see them if you switch to them. You can view two sections of a single workbook in different windows. Switch to the workbook you want to view, click the View tab and then click New Window (). Follow Steps I to 4 to open the Arrange Windows dialog box and select a view option. Click the Windows of active workbook check box (changes to), and then click OK.

FIND AND REPLACE TEXT IN A WORKBOOK

If you need to find specific text in a workbook, you can save a lot of time by using Excel's Find feature, which searches the entire workbook in the blink of an eye.

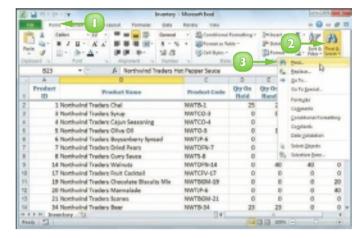
In a workbook that has only a small amount of data and just a few worksheets, you can usually find the data you want fairly quickly. However, in a large workbook with multiple sheets, it can be time-consuming to find specific text, so Excel's Find feature can help.

Click the **Home** tab.

Find Text in a Workbook

- Olick Find & Select.
- Click **Find**.

Note: You can also run the Find command by pressing **Ctrl**+**E**.



The Find and Replace dialog box appears.

4 Click in the Find what text box and type the text you want to find. ind and Replace

- Click Find Next.
 - If Excel only looks in the current worksheet for your term, click Options in the Find and Replace dialog box. Click the Within 🖃 and then click Workbook. This option tells Excel to examine the entire workbook for your search text.

A Excel selects the next cell that contains an instance of the search text.

Note: If the search text does not exist in the document, Excel displays a dialog box to let you know.

- 6 If the selected instance is not the one you want, click Find Next until Excel finds the correct instance.
- Click **Close** to close the Find and Replace dialog box.

Excel leaves the cell selected.

Replace Text in a Workbook

- Click the **Home** tab.
- Click Find & Select.
- Click **Replace**.

Note: You can also run the Replace command by pressing Ctrl + H.

- In the Find what text box, type the text you want to find.
- In the Replace with text box, type 5 the text you want to use as the replacement.
- 6 Click Find Next.
- Click **Replace** or **Find Next**, as appropriate.
- 8 When you have replaced all of the instances you want to replace, click Close.



In the Find and Replace dialog box, click Replace All to tell Excel to replace every instance of the search text with the replacement text.

| | - A | В | ¢ (| 0 | E | E F | . 8 | Ha |
|------|---------|---|------------------|---------|---------|-----------|------------|---------|
| | Product | Product Name | Predact Code | Qtty On | Qtty On | Qtty | Qty On | Rear |
| 25 | | Northwind Traders Green Tea | Find and Replace | | | | 18.0 | |
| 38 | 62 | Northwind Traders Granola | Frig Beginn | | | | | |
| 31 | 83 | Northwind Tablers Patate Chips | Redukate asses | | | | 123 | |
| 22 | 85 | Nativuind Teaders Brownie Mix | Polisheto peero | | | | = | |
| | 85 | Northwind Teadars Cake Mix | | | | | | |
| 34 | 87 | Northwind Teaders Tea | | | | | Report to: | |
| - | | Northwind Teaders Pears | | | | | | |
| 38 | | enthuind Treders Peeches | | Ap | 6.48 | End Next- | . den | |
| 32 | | Morthwind Traders Pineapple | | _ | | | | |
| 58 | 95 | Northurind Teaders Cherry Pie Fillin | M NUTCPV-91 | | | 2 | 0 0 | - u |
| 29 | 92 | Northwind Teaders Green Beans | NWTCPV-92 | - 0 | E 6 | | 0 0 | |
| 48 | 99 | Northwind Traders Com | NWTCPV-93 | | | 6 | 0 70 | |
| 41 | 94 | Northwind Traders Peas | MINTCPV/94 | | | | 0 0 | |
| 14 4 | | and and the section | | 14 | - | | | |
| Res | 10 23 | | | | | 3 sm 🖂 | | - (F) _ |



| + Contact Title | - Address |
|---|---|
| Sales Representative | Via Monte Branco 7 |
| Sales Associate | Av. dos Lusledes. |
| Balos Representativo | Obere Str. 57 |
| Bales Representative | Faurlieros Circus |
| Accounting Manager | Rue da Panificado |
| Marketing Manager | Garden HouseCrox |
| Order Administrator | Bergevovägen 8 |
| Cwner | Enting Shankes gat |
| Cwner | 265, boulevard Chi |
| Bates Manager | P.O. Bax 555 |
| Bares Representative | Beikeley Cardens 1 |
| Accounting Manager | OVER VIA, 1 |
| Accounting Manager | Boulevard Tirol. 25 |
| Marketing Assistant | Marreda des Carv |
| RASPORTIN'S RASINGLY | General de Feanan |
| | |
| | 22 10m (-) |
| | Sales Receptertaine Sales Associate Sales Associate Sales Associate Sales Representative Recounting Manager None Sales Representative Sales Representative Sales Representative Accounting Manager Accounting Manager Accounting Manager Accounting Manager |

MODIFY WORKBOOK COLOURS

You can give your workbook a new look by selecting a different colour scheme. Each colour scheme affects the workbook's text colours, background colours, border colours, and more. Excel offers more than 20 colour schemes.

To get the most out of Excel's colour schemes, you must apply styles to your ranges, as described in Chapter 4.

Apply a Colour Scheme

- Open or switch to the workbook you want to format.
 - Click the **Page Layout** tab.

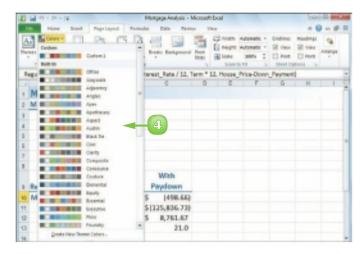
| 1 | rine Bast | Page | Lapert | C | 2 en Analysis + 1 | | | | | | | | + 6 | | 1 2 |
|---------|---------------------|------|-------------|-------|-------------------|----------|----------------|--------------------------------|--------|-------|---|-------|----------|-----|-----|
| III and | | K A | | 1 H H | National States | - | at a System | nal Formal Califie * 1 * | ling - | 10 | hoeri - Datata - Tannal - Colo | N R Y | ALL DATE | A | |
| | gular_Paument + (* | | A +PMTp | - | est_Rate / \$2.1 | lerm * 1 | 12,1 | House_P | Vice-C | hower | Payne | 40 | | | |
| | A | | 8 | | c | 8 | | 8 | | - | - 0 | | н | - F | |
| 1 | Mortgage Ana | lys | is | | | | | | | | | | | | |
| | Mortgage Data | | | | | | | | | | | | | | |
| 3 | House Price | \$ | 100.000 | | | | | | | | | | | | |
| 4 | Interest Bate | - | 4% | | | | | | | | | | | | |
| 5 | Down Payment | s | | | | | | | | | | | | | |
| 6 | Term | | 25 | | | | | | | | | | | | |
| 2 | Paydown | \$ | (50) | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | 1 | Regular | | With | | | | | | | | | | |
| | Results | N | fortgage | 1 | Paydown | | | | | | | | | | |
| 10 | Monthly Payment | \$ | (448.66) | \$ | (458.66) | | | | | | | | | | |
| 11 | | _ | 134,598.390 | \$1 | 125,836.73) | | | | | | | | | | |
| 12 | Total Savings | 1 | 214,04 | \$ | 8,761.67 | | | | | | | | | | |
| 13 | Revised Term | | 814,06 | | 21.0 | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| • • | + + Horigage Analys | 1.3 | 2/ | | | | B | - | | | A | _ | - | | |
| Frè | 4 2 | | | | | | | | 144 | 94 | 3 (200%) (| 1 | | | 5 |



| Ð | La group the | | | Montgarger-Annalysis + 2 | Moread | (Boot) | | | 100 | 1.00 | < |
|-------------|---|-----|---------------|--------------------------|--------|---------------------------------|------------------------------------|--|-----|-------|---|
| | the Hone Buck | | Lapout Roma | in Data Ravio | on V | w. | | | + 6 | 0 - 0 | = |
| 1 | Tradi - Mayna I Mayna I Danar | 3 | ten lan And | Beats Baltymond | 11 11 | El nageo El nageo El lade | Adamatis - Adamatis - 200% - | Contineer Contineer Contineer Contineer Contineer Contineer | | | |
| | egular, Payment 🔹 🖓 | | .6 «PMTps | ment_Rate / 12, 1 | Term.* | 12. House | Price-Dow | Paymen | e1 | | |
| | A | | | c | 8 | | | 0 | H | 1.1 | |
| | | | | | | | | | | | |
| 1 | Mortgage Ana | lys | is | | | | | | | | 1 |
| 1 | Mortgage Ana Mortgage Data | lys | is | | | | | | | | 1 |
| | 0.0 | | 100,000 | | | | | | | | |
| 3 | Mortgage Data | \$ | | | | | | | | | |
| 3 | Mortgage Data House Price | \$ | 100,000 | | | | | | | | |
| 1 2 3 4 5 8 | Mortgage Data House Price Interest Rate | 5 5 | 100,000 4% | | | | | | | | |

Click the colour scheme you want to apply.

A



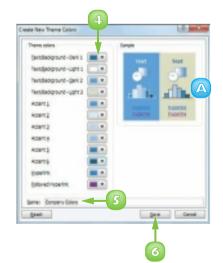
Excel applies the colour scheme to the workbook.

| 1 | A | | B | | 1.0 | 1.6 | 1 | G N | 1.4 |
|----|-----------------|------|---------------------|-----------------|-----|-----|---|-----|-----|
| 1 | Mortgage Ana | lys | is | | | | | | |
| 2 | Mortgage Data | | | | | | | | |
| 2 | House Price | s | 100,000 | | | | | | |
| 4 | Interest Rate | | 4% | | | | | | |
| 6 | Down Payment | 5 | 15,000 | | | | | | |
| 6 | Term | | 25 | | | | | | |
| 1 | Paydown | \$ | (50) | | | | | | |
| 8 | | | | | | | | | |
| | Results | | Regular lortgage | With Paydown | | | | | |
| 10 | Monthly Payment | \$ | (448.66) | \$ (498.66 | 0 | | | | |
| 11 | Total Paid | \$(1 | 34,596.39 | \$1125,836.73 | 0 | | | | |

Create a Colour Scheme



- 🔼 Click 国.
- Click Create New Theme Colors.
- 4 For each item in the Theme colors list, click and then click the colour you want to use.
 - The Sample area shows what your theme colours look like.
- Type a name for the custom colour scheme.
- 🙆 Click **Save**.



SET WORKBOOK FONTS

You can add visual appeal to your workbook by selecting a different font scheme. Each font scheme has two defined fonts: a *heading font* for the titles and headings and a *body font* for the regular worksheet text. Excel offers more than 20 font schemes.

To get the most out of Excel's font schemes, particularly the heading fonts, you must apply styles to your ranges, as described in Chapter 4.

Apply Fonts to a Workbook

- Open or switch to the workbook you want to format.
- Click the **Page Layout** tab.

| | 4 | 1 8 - 10- | A-A- 2010- | | Pornet as for Call Bytes - Three | | Ponts - Droval - Offi | 2. 50 | tà Andà nº Intel · | |
|----|--------------------|------------------------|---------------------------|-------------------|--|-----------------|-----------------------------|-----------------|-----------------------|----|
| _ | 823 | + (* | & Northwiel Trades H | Aut Papper Sauce | | | | _ | | |
| | A Preduct ID | | 0 Product Name | C Product Code | Quy Chin Handad | Qty-tha Hand | Qy Analishin | gy Da Drifer | H Reorder Level | |
| 2 | 3 | Northwind Teach | int their | NWT6-1 | 15 | 25 | 0 | 41 | - 10 | ŝ |
| 2 | 3 | Northward Tasks | ex turup | NWTCD-8 | | 50 | 50 | 50 | 31 | i |
| 4 | 4 | Northeated Table | ers Calun Seasoning | NWTCD-8 | | | Ú. | 40 | 1 | ł |
| 8 | | Northrutnel Table | es. Olive Oli | NWTO-8 | | 18 | 28 | 0 | 10 | ŝ |
| 6 | | Northraind Table | ers Boysenberry Speed | NWT/P-6 | | | D | 10 | 31 | i |
| T | 3 | Northcaled Teacle | ers Delad Pears | NATOR67 | | | 0 | 0 | 10 | i |
| 8 | | Northwind Trade | ers Curry Seven | NWTS-8 | | | 0 | 0 | K | i |
| 3 | 14 | Northwind Track | es Weinets | NWTORH:14 | | -40 | 40 | 0 | 30 | i |
| 10 | 17 | Northwind Trade | ers Fruit Cecktell | NWTCF#-67 | | | 0 | 0 | 30 | i |
| 11 | 1.9 | Northwind Tasks | es Checolate Biscultz Mis | NWTINEM-19 | | | 6 | 30 | | ŝ |
| 12 | 28 | Northwind Teach | ers Maemalade | NIVTUP-6 | | | 0 | 60 | 20 | ġ, |
| 10 | 23 | Northeated Taade | es laines | NWTHEM-21 | 4 | | Ó | ó | | ł, |
| 12 | 34 | Northwind Table | ors Beer | NWT8-84 | 28 | 28 | (D) | Q. | 11 | ė. |
| 18 | - 40 | Northesited Taple | ers Dals Meat | NWTCM-40 | | | 0 | 130 | 30 | į |
| 18 | 43 | Northulad Table | ers Clam Chevular | NWT90-41 | | | 0 | 0 | ĸ | ř, |
| 16 | | | | | 325 | | 0 | 500 | 15 | |

3 Click **Fonts** (A).

| ri I | 日本の日 | 1.14 | in la | entry - Monerh Exce | 1 | | | 1 | 0140 | 0 |
|------|---------|----------------------------|---------------|---------------------|-----------------|-----------------|--|-----------------|---------|----|
| ī, | - | e boat Reprinted | Formulas Dido | Review Vites | | | | | 0.00 | 1 |
| 0 | Trees. | | Tapitolog | Approved State | NUT HADD | en - 12 | Next Pauling View III View And II Paul and Collocal | Anne | - | |
| | 829 | + C - A | North-Index (| Aut Papper Sauce | | | | | | |
| | - A- | (|) | 0 | - D - | E | | 6 | 11 | |
| | Preduct | Produc | t Name | Product Code | Quy On Hadal | Qty-tha Hand | Qy Anallable | Qry On Order | Reorder | |
| 2 | 3 | Northwind Teaders Chail | | NWTD-1 | 15 | 25 | 0 | 41 | - 1 | ö |
| 5 | | Northword Teadwe Syru | | NWTCD-8 | | 54 | 50 | 50 | 2 | 5 |
| 4 | | Northwind Teaders Cale | in Imasoning | NWTCD-8 | | | Ó | 40 | 1 | à |
| ŧ. | | Northwind Taskes Oliv | e Óli | NWTO-8 | | 15 | 28 | Ó | 3 | à |
| 6 | | Northwind Tablers Boys | lenters toned | NWTIP-6 | | | D | 10 | 3 | s |
| T | 3 | Northcaired Teachers Drive | d Pears | NATOR67 | | | 0 | 0 | 3 | a |
| 8 | | Northwind Teachers Curr | y Seven | NWTS-8 | | | 0 | 0 | | ġ. |
| 5 | 14 | Northwind Trackers Web | NUTS . | NWTOR644 | | - 40 | 40 | 0 | | 6 |

Click the font scheme you want to apply.

4

| 10 | 0.104 | 128 | in the | antop - Microsoft Excel | | | | | 0100 |
|----|----------------|-----------------------|---------------------|-------------------------|---|----------------|---------------------------|----------------|---------|
| - | 100 | bunt Appriators | Formula: Dido | Receiver Voter | | | | | Godi |
| | 1 York | and the L | And And In | and the state | nation inclusion nation inclusion nation in the | 8 · 2 | View II vie Nad Not | _ | |
| | As | Canbria | * Invited Traders I | Aut Pepper Sauce | | | | | |
| | 160 | Carlor | | 0 | D | E. | 1 | - 6 | H |
| Pi | Ai | Callori Datate | | Product Code | Qty On Hald | Qy the Hand | Qy Anallable | dy fu Order | Reorder |
| | | | | NWTD-1 | 25 | 25 | 0 | 41 | 30 |
| | | Artist | | NWTCD-8 | 8 | 58 | 50 | 50 | 35 |
| | As. | Taxas New Rowan | easeing | NWTCD-8 | | | Ó | 40 | 30 |
| | _ | Miles Stands 2 | | NWTO-6 | | 15 | 25 | Ó. | 10 |
| | . | Arial | 4 | NWT/P-0 | | | Q. | 30 | 28 |
| | As | with . | | NWTOPN 7 | | | 0 | 0 | 30 |
| | | Priliment a | 14 | NWTS-8 | | | 0 | 0 | 30 |
| | | Cambria | | NWTDEN-14 | | - 40 | 40 | 0 | 30 |
| | Ae. | Enritor | ital . | NWTCFI-67 | | | 0 | 0 | |
| | | linging . | b Biscultz Mik | NWTBGM-39 | | | 0 | 20 | 5 |
| | A ₄ | Franklin Cathle M | 34 | NWTIP-6 | | | 0 | 40 | |
| | na l | Preside Dalleis Seals | | NWTRGM-21 | | | Ó | Ó | 5 |
| | | Mpost . | | NWT9-34 | 29 | 23 | 0 | 0 | 15 |
| | Aa. | Lacida Sans | * | NWTCM-40 | 4 | | Ó | 530 | 80 |
| | | Book Antique | * under | NW190-41 | | | ņ | (Ö | 10 |
| | (Dec | inities Trave Arris. | | NWT8-43 | 325 | 325 | 0 | 300 | 35 |

- Excel applies the heading font to the workbook's headings.
- B Excel applies the body font to the workbook's regular text.

| _ | de la | | ~ | 0 | | | | н |
|---|---------------|--|--------------|----------------|----------------|------------------|-----------------|---------|
| | Product ID | Product Name | Product Code | Qty On Hala | Qty-On Hand | Oty Available | Qty On Order | Reorder |
| | 8 | Northwind Traders Chai | WATE-1 | 15 | 25 | 0 | -41 | 10 |
| | 3 | Northwind Trades Syrup | 1WTC0-3 | | 50 | 50 | 58 | 25 |
| | 4 | Northwind Traders Cajan Seasoning | WWTCD-4 | | 0 | 0 | 48 | 18 |
| | 3 | Northwind Traders Olive Of | MWT0-5 | | 15 | 15 | | 11 |
| | | Northwind Traders Reparaberry Spread | NWTJP-6 | | D | a | 10 | 2 |
| | | Nurthwind Traders Dried Pears | NWIDEN-7 | | 0 | a | | 11 |
| | 8 | Northwind Traders Curry Sauce | NWTS-8 | | 0 | 0 | | |
| | - 14 | Northwind Traders Walnuts | WATDRN:14 | | -40 | -40 | | |
| | 17 | Northwind Traders Fruit Cocktail | INVICEV-17 | | 0 | 0 | | 11 |
| | 29 | Northwind Traders Checolate Biscaits Mix | WTBGM-19 | | 0 | 0 | 28 | |
| | 20 | Northwird Traders Marmalade | MWTJP-6 | | Ó | a | 40 | 11 |
| | 25 | Northwind Traders Scenes | NWTEGM-21 | | D | a | | |
| | 34 | Northwind Traders Beer | MWTB-34 | 23 | 23 | a | | 1 |

Create a Font Scheme

- Click the **Page Layout** tab.
- 2) Click 🖪.
- Click Create New Theme Fonts.
- Click the Heading font I and then click the font you want to use for titles and headings.
- Click the Body font and then click the font you want to use for regular worksheet text.



- The Sample area shows what your theme fonts look like.
- Type a name for the custom font scheme.





CHOOSE WORKBOOK EFFECTS

You can enhance the look of your workbook by selecting a different effect scheme. The effect scheme applies to charts and graphic objects, and each scheme defines a border style, fill style, and added effects, such as a drop shadow or glow. Excel offers more than 20 effect schemes.

To get the most out of Excel's effect schemes, you must apply styles to your charts, as described in Chapter 9.

- Open or switch to the workbook you want to format.
- 2 Click the **Page Layout** tab.

| | 4 9 | - 12 - M | | Cuttom | · 4 | printer 2 | - 17 | a |
|---------|----------------------------|---|---|--|--|---|---|---|
| - | | 1 I · K · I | 1 H H | 31.0 | 2040 | 2ª Delete - | Cont & | Pend & |
| Cherk | sand is | Tall is at | ipened i | | | Dillo | A" Artist * 1 | Set. |
| | .116 | + (* ji | | | | | | |
| | A | 8 | c | D | 8 | F | G | н |
| _ | | | | | | | | |
| | | | | | | | | |
| 2 | Division | Description | Number | Quantity | Cost | Total Cost | Retail | Grass Margin |
| 2 | Division 4 | Gangley Plars | D-178 | 57 | \$ 10.47 | \$ 596.79 | \$ 17.95 | 71,4% |
| 3.4 | Division 4 3 | Gangley Plans HCA8 Washer | D-178 A-201 | 57 856 | \$ 10.47 \$ 0.12 | \$ 586.79 \$ 182.72 | \$ 17.95 \$ 0.25 | 71,4% |
| - | 4 8 | Gangley Plars HCA8 Washer Finley Sprocket | D-178 A-201 C-898 | 57 856 357 | \$ 10.47 \$ 0.12 \$ 1.57 | \$ 586.79 \$ 182.72 \$ 560.49 | \$ 17.95 \$ 0.25 \$ 2.95 | 71,4% 108.9% 87.9% |
| 3.4 | 4 8 2 | Gangley Pliers HCAB Washer Finley Sprocket 6° Sonotube | D-178 A-201 C-098 B-111 | 57 856 167 86 | \$ 10.47 \$ 0.12 \$ 1.57 \$ 15.24 | \$ 586.79 \$ 180.72 \$ 560.49 \$ 1,510.64 | \$ 17.95 \$ 0.25 \$ 2.95 \$ 19.95 | 71,4% 108.8% 87.9% 30.9% |
| 34567 | 4 8 1 2 4 | Gangley Plans HCAB Washer Finley Sprocket 6" Sonceube Langstrom 7" Wrench | D-178 A-201 C-898 B-111 D-817 | \$7 856 357 86 75 | \$ 10.47 \$ 0.12 \$ 1.57 \$ 15.24 \$ 15.69 | \$ 586.79 \$ 100.72 \$ 580.49 \$ 1,530.64 \$ 1,530.64 | 5 17.96 5 0.25 5 2.95 5 19.95 5 27.95 | 71,4% 108.8% 87.9% 30.9% 40.5% |
| 345678 | 4 8 2 4 3 | Ganglep Piers HCA8 Washer Rinley Sprocket 6" Sonotube Langstrom 7" Whench Thomgson Socket | D-178 A-301 C-898 B-311 D-817 C-321 | 57 856 357 85 75 298 | \$ 10.47 \$ 0.12 \$ 1.53 \$ 15.24 \$ 15.60 \$ 3.13 | \$ 586.79 \$ 182.72 \$ 560.49 \$ 1,520.64 \$ 1,520.64 \$ 1,401.75 \$ 936.78 | \$ 17.96 \$ 0.25 \$ 2.96 \$ 19.96 \$ 27.98 \$ 5.96 | 71,4% 108.8% 87.0% 90.9% 49.5% 91,3% |
| 3455789 | 4 8 2 4 8 3 | Gangley Pliers HCA8 Washer Roley Sprocket 6° Sonotube Langstrom 7° Wranch Thompson Socket 5 Joint | D-178 A-301 C-898 B-111 D-817 C-321 A-382 | 57 856 367 85 75 298 155 | \$ 10.47 \$ 0.12 \$ 1.57 \$ 15.24 \$ 35.69 \$ 3.13 \$ 6.85 | \$ 586.79 \$ 100.72 \$ 560.49 \$ 1,330.64 \$ 1,401.75 \$ 926.78 \$ 1,061.75 | 5 17.95 5 0.25 5 2.95 5 19.95 5 27.95 5 5.96 5 9.96 | 71,4% 108.5% 87.0% 90.9% 40.5% 91,3% 45.5% |
| 345678 | 4 8 2 4 3 | Ganglep Piers HCA8 Washer Rinley Sprocket 6" Sonotube Langstrom 7" Whench Thomgson Socket | D-178 A-301 C-898 B-311 D-817 C-321 | 57 856 357 85 75 298 | \$ 10.47 \$ 0.12 \$ 1.53 \$ 15.24 \$ 15.60 \$ 3.13 | \$ 586.79 \$ 100.72 \$ 560.49 \$ 1,330.64 \$ 1,450.75 \$ 936.78 \$ 1,061.75 | 5 17.95 5 0.25 5 2.95 5 19.95 5 27.95 5 5.96 5 9.96 | 71,4% 108.8% 87.0% 90.9% 49.5% 91,3% |
| 3455789 | 4 8 2 4 8 3 | Gangley Pliers HCA8 Washer Roley Sprocket 6° Sonotube Langstrom 7° Wranch Thompson Socket 5 Joint | D-178 A-301 C-898 B-111 D-817 C-321 A-382 | 57 856 367 85 75 298 155 | \$ 10.47 \$ 0.12 \$ 1.57 \$ 15.24 \$ 35.69 \$ 3.13 \$ 6.85 | \$ 586.79 \$ 100.72 \$ 560.49 \$ 1,330.64 \$ 1,401.75 \$ 926.78 \$ 1,061.75 | 5 17.95 5 0.25 5 2.95 5 19.95 5 27.95 5 5.96 5 9.96 | 71,48 108.99 87.09 90.99 40,59 91,59 81,59 45,59 |

3 Click **Effects** (💽).

| 811 | 9.0 | - 4 | P.a. | to Constance - N | Accessort live | 1 | | an di | - 0 |
|------|--------------------|----------------|--|------------------|----------------|-------------------------|-----------------------------------|--|-----|
| - 14 | . Para | e Doet Popring | est Permite | Data A | rsies N | ev . | | 4 Q = | 91 |
| A | A forta | - | 1. | ngia Bahara | 1 III | El Martin Auf | ondie - 1 ondie - 1 00% I 1 | Stations Headings 20 Mars 20 Mars 20 Parts 11 Parts Sheet Options 12 | - |
| | 116 | + (*) | 6 | | | | | | |
| 4 | A. | B | C | D | E | · F · · · | 6 | н | 1 |
| | | Doute D |) at a h | 250 | | | | | |
| 1 | | Parts D | Jacab | ase | | | _ | | |
| 1 2 | Division | Parts L | Number | Quantity | Cost | Tetal Cast | Retail | Gross Margin | |
| | Division 4 | | | | Cost 5 50.47 | Tetal Cast \$ 596.79 | Retail \$ 17.95 | Grass Margin 71.4% | |
| 2 | Division 4 3 | Description | Number | Quantity | | | | and the second division of the second divisio | |

Click the effect scheme you want to apply.



Excel applies the effect scheme to the workbook's charts and graphics.

| | | Parts Da | atab | ase | | F | 0 | н | |
|----|-----------|---------------------|--------|----------|----------|-------------|----------|--------------|--|
| 2 | | Description | Number | Quantity | CHR | Tetal Cost | aura d | Gress Margin | |
| 2 | 4 | Gangley Pilers | D-178 | 57 | \$ 50.47 | \$ \$96.79 | \$ 17.95 | 71.4% | |
| 4 | 3 | HCA8 Washer | A-201 | 858 | 5 0.12 | \$ 102.72 | \$ 0.25 | 108.5% | |
| | 3 | Pinley Sprocket | C-098 | 357 | \$ 1.87 | 5 580.49 | \$ 2.85 | 82.9% | |
| 6 | 3 | 6" Sonotube | 8-111 | 86 | \$ 15.24 | \$ 1,350.64 | \$ 19.95 | 30.9% | |
| 7 | 4 | Langstoon 7" Wrench | D-017 | 75 | \$ 19.69 | \$ 1,401.75 | \$ 27.95 | 43.5% | |
| 8 | 3 | Thompson Socket | C-521 | 298 | \$ 3.11 | \$ 926.78 | \$ 5.55 | 91.5% | |
| - | 1 | S-Joint | A 182 | 255 | 5 6.85 | \$ 1,061.75 | \$ 9.95 | 45.8% | |
| i0 | . 2 | LAMF Valve | 8-047 | 482 | \$ 4.01 | \$ 1,982.82 | 5 6.85 | 73.1% | |
| 1 | N N Parts | /PHI /PHI /2 | ~ | | | | | _ | |

The colour you see in the effect schemes depends on the colour scheme you have applied to your workbook. If you want to use a custom effect colour, create a custom colour scheme and change the Accent I colour to the colour you want.



STOP Excel does not have a feature that enables you to create your own effect scheme.

APPLY A WORKBOOK THEME

You can give your workbook a completely new look by selecting a different workbook theme. Each theme consists of the workbook's colours, fonts, and effects. Excel offers more than 20 predefined workbook themes.

To get the most out of Excel's workbook themes, you must apply styles to your ranges, as described in Chapter 4, and to your charts, as described in Chapter 9.

Apply a Workbook Theme

- Open or switch to the workbook you want to format.
- Click the **Page Layout** tab.







4

Click the workbook theme you want to apply.



Excel applies the theme to the workbook.



Create a Workbook Theme

- Format the workbook with a colour scheme, font scheme, and effect scheme.
- 2 Click the **Page Layout** tab.
- 🛐 Click 🔤.
- Click Save Current Theme.

The Save Current Theme dialog box appears.

5 Type a name for the custom theme.

Olick Save.



CONTENTS

- **I52** Sort a Range
- **I54** Filter a Range
- **I56** Set Data Validation Rules
- I58 Convert a Range to a Table
- 60 Create a Data Table
- I 62 Summarise Data with Subtotals

ANALYSING EXCEL DATA

You can get more out of Excel by performing *data analysis*, which is the application of tools and techniques to organise, study and reach conclusions about a specific collection of information.

In this chapter you learn how to sort and filter a range, apply data validation rules to a range, convert a range to a table, create a data table and summarise data using subtotals.



SORT A RANGE

You can make a range easier to read and easier to analyse by sorting the data based on the values in one or more columns.

You can sort the data in either ascending or descending order. An ascending sort arranges the values alphabetically from A to Z or numerically from 0 to 9; a descending sort arranges the values alphabetically from Z to A or numerically from 9 to 0.

[2] [2] (0 + (0 +));

- Click any cell in the range you want to sort.
- Click the **Data** tab.
- Click **Sort** (💷).

| 049- 30- | an Laturals El Set Page 3 | Andrew Columna Copicates II | | | tion is | Avapate |
|-------------|----------------------------------|-------------------------------|--------------|--------|--------------------|-----------|
| A2 | - A 4/10 | | | | | |
| .4 A | | c | 0 | | | di la |
| Custamer ID | Company | Address | City | Region | Perial Code | Country |
| 3 11190 | | Obere Mr. 87 | Revin. | | 11300 | downany |
| 5 AAUTA | Ana Trujila estados y helades | Anta-ole la Constitución 2222 | México B.A. | | 109025 | Mexico |
| 4 ANTON | Antonia Maxamo Taquaria | Weterlerop 2552 | Mexico 0.7. | | 109623 | Mexico |
| ABOUT | Around the Holm | 130Hamover Sq. | uoneton | | WAL18P | 18 |
| 6 1007-00- | Berglunds anabitiköp | despurchipen 8 | culeă. | | 5-858.22 | Sunder |
| T BUAUS | Blauer bee Delikatesser | Pokaekar, 37 | Adaptivents | | 65300 | Gennary |
| BLOWP | Rhorshellplane at Ms | 34, phare Klöber | Topporg | | #1000 | Fiance |
| 6000 | Ballide Comidae, preparadaes | Cl'Annual, 87 | Madrid | | 38625 | Spain |
| 0.00440 | Ser-app' | 12 me des liquetiers | Marsellie | | 12000 | Dance |
| 1 807TM | Bentom-Boiler Warkets | 23 Toanspoor Blied. | Tarwassin | BC . | 121 (014 | Canada |
| I READY | th's the workspect | Asuntiwoy Draw | London | | IC2:5NT | UK . |
| 8 GACTU | Calified Corrichae parts (Tankar | Caento 202 | Buenes sines | | 3030 | Argentina |
| 4 CBNTC | Caritro somewal titleboovma | Remark de Chanada MMI | AM#100-0.5. | | 04013 | Mexico |
| 5 CHOPS | Chop-sury Chinese | Hauptoin 29 | Sern . | | 1012 | Subsedars |
| 6 COMMI | Comércio Mineiro | Air, doc (unliades, 23 | São Paulo | 52 | (8432-843 | Breel . |
| 7 00494 | Canaolidated Holdings | Bankaley-Gurdenzt2 Brewery | uoneton | | 10110.7 | 10 |
| E DRACD | dradhenblut belikutassen | visioevegiti | Auchen | | 12066 | deenary. |
| P DUNDN | Dumande entrer | ST, rue des Dirauente-Otages | 7587046 | | 44000 | FRance |
| ID BARTC | Radiery Connection | 83 King Gaorge | London | | 1003-074 | UK. |

The Sort dialog box appears.

- Click the Sort by and then click the field you want to use for the main sort level.
- Click the Order and then click a sort order for the field.
- To sort on another field, click Add Level.



\Lambda Excel adds another sort level.

- Click the **Then by** and then click the field you want to use for the sort level.
- 8 Click the **Order ⊡** and then click a sort order for the field.
- Repeat Steps 6 to 8 to add more sort levels as needed.

🔟 Click **OK**.

Excel sorts the range.



| U Ded Al Disk 34 Rah H Brit 0 Ric 0 Mar 0 Sup 8. Bis 1 Rah H Rah | rgeory Neme top Epinidas pera Rever non Artilieris LSB. Ena grande Li Handed di sand metr con Densy elemes Célicas renet Lanchonetes Ingles Inigotisatora ari Camas | Addree Centre 516 mg. Gutter Woncaste Idd2/rise 3 mu. del Loerador 100 Crintgase 8 Senteng 12 Senteng 14 No. Social-Adm. 500 Biouter Metsala, 52 Biouter Metsala, 52 Biouter Metsala, 52 | Buanos Aires Buanos Aires Buanos Aires Data Data Salabung Brunolles Charlesol Campinas Resente | - | Pertal Code 2020 2020 2020 5030 6-2380 8-4000 0475-784 04752-943 | Argentine Argentine Argentine Austrie Austrie Bolgium Bolgium Braul |
|--|---|--|--|--|---|---|
| All DEB All DEB All Bank All Bank D Bank <td>ano attiántice Ltóle. dha grande la Handel die sund meter son Desvely démas délices venet Landhonentes lington Importadore</td> <td>Ing, Guittava Moncada-Iblid/Noc.3 Illiu, ani Uberlador Isto Circlegase 8 Resenang 14 Ros Iosoph-Bent Sto Roulevant Trou, 155 Bio-Resett, 400 Roulevant Mitstatle, 12</td> <td>Buence Aires Buence Aires Dial Salatung Brunolles Charlesci Campinan Resembe</td> <td></td> <td>3090 3090 9090 8-1380 8-4000 8-4000 04275-784</td> <td>Argentina Argentina Austria Austria Belgium Belgium Brazil</td> | ano attiántice Ltóle. dha grande la Handel die sund meter son Desvely démas délices venet Landhonentes lington Importadore | Ing, Guittava Moncada-Iblid/Noc.3 Illiu, ani Uberlador Isto Circlegase 8 Resenang 14 Ros Iosoph-Bent Sto Roulevant Trou, 155 Bio-Resett, 400 Roulevant Mitstatle, 12 | Buence Aires Buence Aires Dial Salatung Brunolles Charlesci Campinan Resembe | | 3090 3090 9090 8-1380 8-4000 8-4000 04275-784 | Argentina Argentina Austria Austria Belgium Belgium Brazil |
| H Brie H Brie D Prot D Sup E Bos I Brie H Ret | zha grande il Handel slo und meter son Devriy elenes délices renet Landonardes lington importadors | Inv. del Lubertador 1000 Orshgesze 8 Geninnig JJ Rus Isseph-Bens 502 Boulevard Tranu, 255 Bir Straut, 400 Rus des Messado, 12 | Buenos Arres Ona) Saloburg Brunolles Charlesco Campinan Resense | | 2020 8020 9020 8-1280 8-6000 547%-764 | Agentina Austria Austria Bolgum Bolgum Brazil |
| H Brie D Roy D Mai D Sup E Biss I Ref I Ref | a Handad slip und meter son Derwiy olimes délices rmet Lanchonates Lington Importations | Cryligase 8 Gebineg 14 Rus Iccept-Boro 502 Boulevant Tirou, 255 Bir-Baart, AD Rus-for Messally, 12 | Brai Kalohung Brunolles Charlesoi Campinan Resende | - | 8020 9020 8-2380 8-4000 04879-784 | Austria Austria Belgium Belgium Brasil |
| 0 Prot 0 Mar 0 Stop 6 Bos 1 Ref 18 Rat | elle und meter sont Derwäy nêmes délices rmet Lanchonetes Lington importations | Gentiling 34 hvs.toeoph-Boro 502 Boulevard Yirou, 255 Biv Board, 462 Rud-de Meesado, 12 | Saldourg Brunolles Charlesol Campinan Resente | - | 9030 8-2380 8-4000 04879-784 | Austria Belgium Belgium Brazil |
| 0 Mar 0 Sup 8 Bin 1 Ref | son Denviy němes dělices rmet Lanchonetes lingter importatiers | Rue Icosoft-Bone 502 Boulevant Timus, 255 Bv. Teast, 482 Rue de Menselle, 12 | Brunolles Charlesol Campinan Resemble | - | 0-2380 8-6000 04270-784 | Bolgium Belgium Brazil |
| 0 Sup L Dis I Net | nêmes dêlices rmel Lanchonetes Englier Importations | Roulevant Tirou, 255 Jay Teast, 482 Ruside Mersalle, 12 | Charlesol Campinas Resente | - | 8-6000 04070-704 | Belgium Read |
| L Dim Net U Part | rmet Lanchonetes Eington Importations | Av. Basil, 482 Ruado Messado, 12 | Campinus Resente | - | 04719-704 | Real |
| i iVel Ul Fan | Engler Importations | Ruado Mensalo, 12 | Resende | - | | |
| U Fan | | | | 58 | 00712-001 | |
| | wri-Ewrney | Rouge In Street AT | | | | Breel |
| | | Nue-De Pago, 67 | Rip de Janeiro | R/ | 10454-876 | Brazil |
| 5 DH | delice | Rus-do Panificadore, 12 | No de Janeiro | 80 | 122029-678 | Brick |
| 1 80 | vite Autoplander | Nu. Capecabana, 287 | the delanest | 10 | 02309-030 | B/SEI |
| M Der | sénce littingrisp | Jav. des Losladas, 23 | silemento | 8.0 | 09432-043 | Breat |
| A Far | olia Angolia di si la | Bualdreis, 53 | Sile Paulo | 5.0 | 109442-890 | Brazil |
| A 014 | er Cocinha | wiemeda dos Caniaries, 883 | silonato | 5.0 | 104417-020 | Bracil |
| H THE | tigle Hipernercades | By INEL OF CHICK, 434 | sile Asulo | 3.0 | 101434-0180 | Bracil. |
| P Mér | e Fellanie | 45 rue 15 Laurent | Moninkal | Culter | HEL 3CT | Canada |
| M BOR | om Dollar Markets | 29 Tsawassen Bival. | Transiser. | 8C | 137 8514 | Canada |
| 6 Leve | thing Becchus Wine Gellers | 1300 Ouk St. | Vancessar | BC . | V972H3 | Ganada |
| | Circle Proc Mere Both Laws Mineet1 | Caseer Cocinha Pracipile Hipermetadas Meer Parliade Botton Dellar Mantets Leoghing Bechus Wine Cellers Meet / Vinet 2 / Vinet 2 / Vinet | Gueser Oppinte Klomode dos Carlieros, 83 tradiĝis injerenancados III Inite de Santo, 44 Meier Mateiro III Inite de Santo, 44 Meier Mateiro III Inite de Santo Leaghing Bachus Winis Cellars II. 1081 Gel 50. Mett. // Weidr. 2014 (2014) (2014) [341] | Courser Counte Mixmode dos Canterino, 803 Sillo-Haulo Practigila Highermerzados Br., Inité de Estatos, 434 Sillo-Haulo Mare Partinade Boltom Dollar Martets 21 Taevasee Bivit. Stansover Langhing Bechur, Wins Geller, 1988 Del Sil. Viennover | Concern Openha Mismeda dos Canieros, 803 Silo Paulo SP Trasiglio repermensados aux. Initir de Canieros, 803 Silo Paulo SP Meser Mismeda dos Canieros, 804 Silo Paulo SP Meser Mismeda SI Su | Concern Coponha Manmedia dos Cantinos, 183 Silico Huadio SP 18467-428 Tracición Higenmerados III Anniel do Estano, 434 Silico Huadio SP 18648-488 Meser President Mantello Estanova III Canaded III Annie III Canadad IIII Canadad III Canadad II |

If you need to sort on only one column, click in any cell in the column. Click the Data tab. In the Sort & Filter group, click for an ascending sort or a descending sort. \checkmark

You can tell Excel to sort a range from left to right based on the values in one or more rows. Follow Steps I to 3 to display the Sort dialog box. Click Options and select the Sort left to right option (() changes to ()). Click OK.

FILTER A RANGE

You can analyse table data much faster by filtering the data. *Filtering* a table means that you configure a field so that you only view the table records that you want to work with. One way to do this is to use the AutoFilter feature, which presents you with a list of check boxes for each unique value in a field. You filter the data by activating the check boxes for the records you want to see.

Apply a Filter

- Click inside the table.
- Click the **Data** tab.
- Click **Filter** (**T**).

| 80 | 1 10 × 10 × | Without Baselaund Persola | 1-2 | | | | | 0-01 |
|-------|--------------|--|---------------------------------|--------------|---------|---------------------------------------|---------------|---------------|
| | | gr. 3 | iter 🔤 📷 🗄 | | 0 1mg | mar • "j | Data Instigut | |
| | Až | * - 5 A.R. | | | | | | |
| | A | 6 | 6 | 0 | 1 | 6 | 6 | 1 |
| L | Sustainar ID | Campany . | Ldives | day | Segint. | Pental Carlo | Gaussing | Contact Ha |
| 2 | Addet | | 00489-321.57 | serio. | | 12899 | Samony | NING BOOM |
| 3 | AbATS | Ana Ingilia adadee o haladee | Weeks, die La Constitución 2000 | stanler-0.7. | | 05511 | Mexico | AnaTrojile |
| 4 | ANTON | Antonio Morene Taquena | Maladanis 202 | RenapO.F. | | 08623 | Mence | Antonia Mar |
| а. | AROUT | Mound the Marn | 1201401014136 | upreprint | | 1043107 | 10. | Thomas Hurs |
| 6 | 685.65 | Regions matching | Berguvnäger 8 | usiek. | | 8-868-32 | Screeker. | Chevenadae |
| Ρ. | #UAUD | Mauner See Chel Auderaphi | Publice VD. 37 | EQUIDED: | | 46836 | Dermany | Harma Moos |
| x. | OUTHP | stonde (pane et: 1/b | ps. piece mitcher | TOWNOUNE | | 04000 | FRATCH. | NENCON |
| | 80.0 | Belluis Comisian propanation | K/Anapuli,47 | Washid | | 28521 | Spain | Natio Serve |
| 10 | agruph. | Barr app* | 12, tut des Bruchers | Three Te | | 13010 | Fearla | Levense Gel |
| 12 | BOTTM . | Bettern-Dollar Varketo | (0 Taxnesen Bivd) | Tany yange | 80 | 121804 | Genete | there are |
| 12 | 468FV | E's Becompts | Feartherey Centra | Lenders | | 8C2 8H/F | 10. | Veteria Ash |
| 13 | CACINU | Codius Commissi para Payari | Devilo 333 | Evenes/Wree | | 2087 | Augustine . | Page-sha Deny |
| 24 | -centro | Eastro somercial Martecuma | Morros de Granafie 9884 | ministrik F. | | 05652 | Mexico | Average (b) |
| 15 | CHOPE | Chap-augy Chinasa | Hauphile 28 | Eanr | | 1013 | Euritmentand | Yang Hang |
| 28 | -betterikis | taméra-antinaira | Hen dies Lasinden. 20 | Sectado - | 58 | 10402-040 | Beach | Padro Alana |
| 17 | 08984 | Tercelidated Heldings | Berkeley-Betterel3 Revery | Genden | | WHO BUT | 108 | Elashath Br |
| | O'B' Reef! | Rendered in the later of the la | Assumed 11 | Lotter | | 13046 | Ranspie | Rand Trial |
| iles. | + 151 I | | | | | C C C C C C C C C C C C C C C C C C C | 0081 (-) | 0.00 |



 \bigcirc Excel adds \boxdot to each field.

Click I for the field you want to use as the filter.

| r | | | | | 0 | 1 | P | 6 | H |
|----|--------------|--|------------------------------|------|--------------|---------|--------------|-------------|-------------|
| | Castomer (1) | Cangary Name (K) | Address | 1.14 | tity i | (Aspic) | Pestal Del - | Country - | CONTRACT IN |
| 2 | ALCO . | Alfreds Putter Unite | Observation, 87 | | larlin . | | 12310 | demary. | Matiaulroh |
| а | AAA7N | And Trupilly Engenerated by Instatus | Aven or in constitution 2020 | | think 2.P. | | 496.55 | Mexico | And Truphs |
| 8 | AN701 | Antonia Marana Taquaria | Matadeeos 1011 | | Minko S.F. | | 10000 | Mexico | Arthres M |
| | ABOUT | Annual the Mean | 108 American Sta | | ion dem | | Will 100 | 5/8 | Themas its |
| 5 | 88505 | Rangfunds crabbing | Responsiger 1 | | a.teb | | 1.858.23 | Roadan | (britten) |
| 2 | BUAIN . | Bibuer See Delikatemen | Partness ST | | theshe in | | 45206 | dennary | warna theo |
| i. | \$10MP | Biomósi páne et/1/b | 34, plana Klabor | | pustad; | | 47909 | Rence | Telephone |
| 6 | 80UD | Bölale Comilia preparadas | K/ Ambeuril, 62 | | indexid. | | 385.19 | Spain | Mathin Sort |
| 10 | ECOMP. | Bort app" | 23, fue des Boudhers | | Deather. | | 18008 | FRANCE | LAURING S |
| - | POTTA | Bottom-Osther Markets | 21 Tammagan Birdi. | | recorded. | 90 | 121 054 | Cenede | Dission? L |
| | 858EH | th's the version of the second | Paurtienty Group | | méne | | 402.000 | 4/8 | Historia 40 |
| 13 | CHCTU | Castus Combiles para Tevar | Cervity 181 | | Lawrence How | | 2020 | Argenting | Petrophy |
| 14 | CENTC | Cantro comencial Medisauma | Energy de Chanada (690 | | Network. | | 09022 | Marrise | Personal C |
| | 04095 | (Asp-sury/Prince) | Laupter II | | iese. | | 4012 | Suitsariand | rang dang |
| 12 | CONAN | Constrain Minutes | durates Lucilation, 20 | 1 | de Ceste | 00 | 01612-061 | Brasil | Patro Mer |
| 3 | CONDH. | Consolidated Holdings | Barkalay Barders22 Bravery | | onden. | | 1003107 | UK | Darbert # |
| a, | MACK. | Partness risianus | NUMBER IN | | NEME: | | 12030 | samery | TARG DISLA |

Excel displays a list of the unique values in the field.

Click the check box for each value you want to see (\square changes to 🚺).

Click OK.

Excel filters the table to show only those records that have the field values you selected.

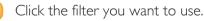
- G Excel displays the number of records found.
 - The field's drop-down list displays a filter icon (......).
- To remove the filter, click Clear (**K**).

Create More Sophisticated Filters

- Follow Steps I to 4 to apply a filter.

Click Number Filters.

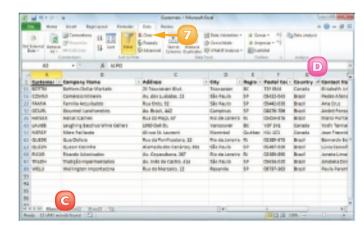
Note: If the field is a date field, click Date Filters; if the field is a text field, click Text Filters.

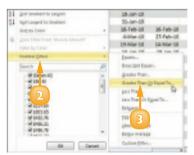


- Type the value you want to use or use the list box to select a unique value from the field.
- Click OK.

| Division of the local | inter and a second | | | | |
|---|--|---|------|---|---|
| | n ogr | • | 2000 | - | 4 |
| | | • | | | |
| | entaris single di lett sina single di | | | | |

| | A | | C C | | 0 | | h | | 5 | | н |
|---|-------------|--------------------------------------|-----------------------------|----|----------------|---------------|------------------|--------------|---------|---|--------------|
| | Castomer EX | Cangary Name (A | Address | 14 | City | N Aug | paint. | Pestal Col - | Country | | Centrel Per |
| 2 | ALF O | Alfreds Putterkieter | Observation 87 | | Barlin 34 | perista . | 1.1 | | | | Matadrole |
| 1 | ANATH. | Any Trupilly Engenerated by Instatus | Aven as a Constitution 2020 | | anima 54 | Spril 1 | | | | | hest built |
| 8 | AN92H | Antonio Morano Tequaria | Mataclesce 2282 | | Minig | Excise | inter- | | | | Arthrid Ma |
| | ABOUT | Annunal the Menn | 108 Americanity | | iende un | | | | | | There is |
| 5 | 6850S | Response crabbine | Reportage: I | | inted. | | | | | | (brating B |
| | #sAits | Bibuer ties Celifiphenen | Partness ST | | 1044 | tot pr | | | | | wanna tifoo |
| | \$10MP | Biomologi palmo et. Tirlip | 34, place Kieber | | truck. | | | | | 1 | Telephone |
| 6 | 40UD | Balate Consider preparades | K/ Arbenil, 67 | | Electri | Insch | | | | 2 | Marin Sore |
| | BOTMP . | Box app' | 23, for des Boushers | | 10mm | | (later August | | | 4 | LAURINE LA |
| 2 | 007754 | Bottom-Deltar Markets | 20 Tammapon Bivel. | | Tarre | | - | | | | thurbert U |
| 2 | 458EH | th's ineversigns | Paurilary Great | _ | uprate i | 0 | inip.e | | | 1 | viceoria kol |
| 3 | CACTU | Castus Combine para Tevar | Centre 181 | 5 | 1 100 | 1 | 197 | | | | Network |
| 1 | CENTC | Cardro comencial Modezone | Dismost do-Dismosla (0000 | E | Jan . | 18 | - | | | | Percess C |
| | 14095 | Chap-sury-Chinese | Lauptor IS | - | 8485 | 18 | - | | | | rarg norg |
| 2 | CONAN | Consists History | due ative Lossilantine, 201 | | Gia Da | | hana | | | | Patro Mar |
| 3 | CONDH | Coverable and the longs | Barkalay Saviers12 Branney | | 201-04 | 12 | larna . | - | | ٠ | Darloof B |
| A | Mars. | Bartantia talianana | TEREMONARY 11 | | 6 | | - | | Onal | | Auto Della |
| | e 3 | | | | | | | _ | | 2 | |





SET DATA VALIDATION RULES

You can make Excel data entry more efficient by setting up data entry cells to accept only certain values. To do this, you can set up a cell with data validation criteria that specify the allowed value or values.

Excel also lets you tell the user what to enter by defining an input message that appears when the user selects the cell.

- Click the cell you want to restrict.
- Click the **Data** tab.
- Click **Data Validation** (\blacksquare).

| L Contra de la con | | | | George - | Morath Ba | 4 | | | | 1018 |
|--|------------|----------------|-----------|----------|-------------|--------------|-----------|--------|--------|--------------|
| Panines Pan | Page Laper | D (8) | levelies. | 14 21 | 100 | - 5 | | | - 1978 | + Q = 0 |
| Pan lat Associates | Evening # | to the rest of | hapedes . | \$4 507 | | diamet Orbit | to Annour | | | + inpage - " |
| - He tokone them | | Quanta | data | | sol a refer | | | 1.1545 | _ | Culture 1 |
| | A | Curre | dan. | | sol a retu | | | | | Cullan I |
| an thomas that BS - (* A | 6 | 6 0 | E | | 4 | н | 1 | 1 | K | L |
| 13 - C | 6 | 6 0 | E | * | 4 | n | 1 | 4 | K | L |
| A Initial Hortgage (Anotation from the Anotation from the | 6 | 8 8 | E | * | 4 | n | 1 | 4 | K | L |
| A Initial Hortgage C | 6 | 0 0 | E | * | 4 | n | 1 | 4 | K | L |

The Data Validation dialog box appears.

- Click the Settings tab.
- In the Allow list, click the type of data you want to allow in the cell.
- Ose the Data list to click the operator you want to use to define the allowable data.
- Specify the validation criteria, such as the Maximum and Minimum allowable values shown here.

Note: The criteria boxes you see depend on the operator you chose in Step 6.



- 8) Click the **Input Message** tab.
- Make sure the Show input message when cell is selected check box is clicked (1).
- Type a message title in the Title text box.
- Type the message you want to display in the **Input message** text box.

| 🔟 Click OK | Ϊ. |
|-------------------|----|
|-------------------|----|

Excel configures the cell to accept only values that meet your criteria.

A When the user selects the cell, the input message appears.

| | | | | | 8 | | | | |
|---|-------------|--------------|-----------|------------------------------|---|-------------|-----------------|---|-----|
| | | | | Date Vel | idation V | | | | 1.0 |
| | | (| 9- | 2 20 2 20 2 20 2 20 | ntzadon I nessagai set trifer a she | pe sher cal | elween (1 and 3 | 8 | |
| Initial Hortgage Income Ease Jarvad Americation (Panel France Polyment Pagement Type | Involution | A | , | a | | | | 5 | |
| Amortization Se | che a. | | | | _ | | - | | |
| · Americanius Veer | Partod Rate | MPCK Paument | Principal | beauter. | Campletive C Precipel | bitarios: | Pancipal | | |

57

You can configure the cell to display a message if the user tries to enter an invalid value. Follow Steps I to 3 to open the Data Validation dialog box and then click the Error Alert tab. Make sure the Show error alert after invalid data is entered check box is clicked (1) and then specify the Style, Title, and Error Message. Click OK.

If you no longer need to use data validation on a cell, you should clear the settings. Follow Steps I to 3 to display the Data Validation dialog box and then click Clear All. Excel removes all the validation criteria, as well as the input message and the error alert. Click OK.

CONVERT A RANGE TO A TABLE

You can apply Excel's powerful table tools to any range by first converting that range to a table. In Excel, a *table* is a collection of related information with an organisational structure that makes it easy to add, edit and sort data.

A table is a type of database where the data is organised into rows and columns: Each column represents a database field and each row represents a database record.

 Click a cell within the range that you want to convert to a table.

- 2 Click the **Insert** tab.
- 3 Click **Table** (III).

Note: You can also choose the Table command by pressing **Curl** + **1**.

| 1 | | - | base | | | | | |
|------|------------------------|--------|----------|---------|------------|---------|--------------|--|
| 2 24 | stan Desergeben | Sumber | Guertity | Cast | Tetal Cest | Resalt | Grees Margin | |
| 1 | Geogley Pliers | 0-378 | 57 | \$30.41 | \$596.79 | \$57.95 | 71% | |
| 5 | 3 HCAB Washer | 4-201 | 856 | \$0.13 | \$4.42.73 | 50.25 | 308% | |
| 5 | S Einley Special | C-098 | 957 | \$1.87 | \$580.48 | \$3.98 | 88% | |
| 5 | 2.6" Senetube | 8-111 | 86 | \$15-24 | \$1,310.84 | 518.95 | 36% | |
| 7 | 4 Langstoom 7" Wiwerd? | 0-817 | 75 | 516.85 | 51.401.75 | 527.95 | 58% | |
| | 5 Thempson Secket | C-821 | 294 | \$8.33 | \$826.78 | 55.95 | 90% | |
| 2 | 1 S-Joint | A-182 | 155 | 96.85 | \$1,061,75 | 58:95 | 45% | |
| 0 | 2 LAME Value | 8-847 | 482 | 54.83 | \$1.902.KJ | 56.95 | 73% | |
| | | | | | | | | |

| All All <th><u> </u></th> <th>1 1 1 1 1</th> <th>1.4</th> <th></th> <th>Parts D</th> <th>stature - Mic</th> <th>-</th> <th>ft Bound of</th> <th></th> <th></th> <th></th> <th>10010</th> <th>-</th> <th>1</th> | <u> </u> | 1 1 1 1 1 | 1.4 | | Parts D | stature - Mic | - | ft Bound of | | | | 10010 | - | 1 |
|---|--------------------|----------------------------|--|--|-------------------------------|--|---|--|---|---|-----------------------|-------|------|---|
| All All <th>-</th> <th></th> <th>a bod date</th> <th>2</th> <th>249</th> <th>Apres 1</th> <th>-</th> <th></th> <th></th> <th></th> <th></th> <th>- 0</th> <th>- 2</th> <th>1</th> | - | | a bod date | 2 | 249 | Apres 1 | - | | | | | - 0 | - 2 | 1 |
| B C D 5 F 0 H 1 3 B C D 5 F 0 H 1 3 B Parts Database Nomber Number Quently Case Total Core Retell Grass Margin 4 Stempter Piler D178 37 \$ 10547 \$ 998.79 \$ 1.785 \$ 71.45 4 Stempter Piler D178 37 \$ 10547 \$ 998.79 \$ 1.785 \$ 71.45 5 3 Polegiperovinc Cole 907 \$ 1.375 \$ 988.49 \$ 2.86 \$ 97.96 5 3 Polegiperovinc Cole 977 \$ 1.355 \$ 2.055 \$ 4.356 \$ 2.076 4 Langstern 7* Wench D617 \$ 15.55 \$ 6.065 \$ 1.06175 \$ 2.055 \$ 4.356 \$ 0.076 5 3 Toengstere File D55 \$ 6.065 \$ 1.06175 \$ 3.356 \$ 1.376 6 3 Lotoff | | 100 100 | The St Loop | | ter i | Conterche | e | To concern | 11 Piar | Etx | Interior and a second | 44.8 | Lota | |
| Parts Database 2 Description Number Care the form Number Statution 4 Sempler Miney Data 9 Statution Statution Statution 4 Sempler Miney Data Statution Statution Statution Statution Statution 5 S Release Miney Data Statution | | #3 | + - 5 | 4 | | | | | | | | | | |
| Parts Database 2 Description Number Quenthy Cee Neetel Green Margin 4 Scenario Plana D178 S 50475 S 99677 S 1266 S 1126 5 S moles Serector A300 658 S 12.2 S 127.5 S 405.7 S 10.76 5 S moles Serector College S 10.72 S 405.7 S 10.76 S 405.75 5 S moles Serector College S 11.75 S 806.49 S 10.85 S 00.76 6 2 Wissocher College S 10.75 S 10.66 S 10.75 S 00.76 6 2 Wissocher College S 10.75 S 10.86 S 10.97 S 00.76 6 2 Wissocher College S 10.75 S 10.86 S 10.97 S 00.76 7 4 Langsson 77 Warket Coll? S 5 86.85 S 10.97 S 10.86 S 10.97 S 10.86 S 10.97 S 10.76 S 10.97 8 3 <t< td=""><td></td><td>-</td><td></td><td>Ć.</td><td>D</td><td>6</td><td></td><td>6</td><td>6</td><td></td><td>1</td><td></td><td>1</td><td></td></t<> | | - | | Ć. | D | 6 | | 6 | 6 | | 1 | | 1 | |
| 4 3 mCAB Weaker A-300 658 5 612 5 193.72 5 325 305.75 5 3 Reley Sproduct C-068 357 5 157 5 984.49 5 2.95 87.75 6 2 4' Smoothin G-018 357 5 158.14 5 2.95 87.75 7 4 Langstown 7' Mearch D-017 7 5 2.864 5 1.93.75 5.29.5 40.25% 8 3 Tompsoon Sociat C-122 2.94 5 1.13 5 5.855 51.7% 5 5 51.7% 5 3.95% 40.25% 5 5 5 51.7% 5 5 51.7% 5 5 51.7% 5 5 51.7% 5 5 1.95% 5 5 5 5 5 5 5 5 5 5 5 1.95% 5 5 5 < | 2.5 | Ohibion | | | | | 10 | tel Cost | | | | | | |
| 5 5 Fining Spender. C-068 357 5 1.37 5 588.48 5 2.88 87.7% 2 2 Standula B-111 46 5 2.18.16 5 1.08.16 5 1.08.17 7 4 Langation 7* Whench D-017 75 5 5.85.6 5 1.09.17 5 3.85.6 61.2% 8 3 Thompson Social C-121 2.04 5 1.15 5 5.85.6 61.2% 5 1 Social A-380 1.55 5 6.45 5 1.08.17 5 3.85 61.2% 5 1 Social A-380 1.55 5 1.55.5 5 3.85 3.3.7% 51 3 LAMO Valve 0-067 482 5 1.90.382 5 3.3.7% 51 3 MAMO Valve 0-067 482 5 1.90.382 5 3.3.7% 51 <th>3</th> <th>4</th> <th>Gengles Pilers</th> <th>D-178</th> <th>\$7</th> <th>5 56.47</th> <th>5</th> <th>556.79</th> <th>\$ 17.85</th> <th>71,4%</th> <th></th> <th></th> <th></th> <th></th> | 3 | 4 | Gengles Pilers | D-178 | \$7 | 5 56.47 | 5 | 556.79 | \$ 17.85 | 71,4% | | | | |
| S 2 #"Senable 0-111 44 5 1524 5 15856 303% 7 4 Langstein 7"Wench D-017 75 5 1868 5 149175 5 2356 40.5% 8 3 Thompson Social C-122 204 5 111 5 0.5% 60.7% 8 3 Thompson Social C-122 204 5 115 5 0.5% 61.7% 5 1 S-baim A-182 155 5 4.65 5 1.05175 5 9.85 45.7% 10 2 1.456*/valve 0-667 482 5 4.05 5 1.90182 5 4.85 73.7% 11 4 4 4 4 4 4 4 4 | | | | | | E 0.15 | | 4.875 7875 | 4 4 35 | 105.7% | | | | |
| 7 4 Langaroum 7* Weach Del07 75 5 586.0 2 4241.75 5 235.6 49.5% 8 3 Thompson Sociate C-125 294 5 1.15 5 905.76 5 5.95 91.2% 5 1 Solatit A-382 155 5 4.65 5 1.051.75 5 9.85 45.3% 55 1 Solatit A-382 155 5 4.65 5 1.051.75 5 9.85 45.3% 55 1 Solatit A-382 155 5 4.65 5 1.051.75 5 9.3% 45.3% 55 1 Solatit S 4.05 5 1.903.82 5 4.35 33.3% 51 3 Solatit S 4.05 1.903.82 5 4.35 33.3% 51 3 Solatit Solatit Solatit 5 4.95 33.3% | | 2 | | | | 2 012 | 2 | 100.12 | | | | | | |
| 8 3 Thompson Socials C-121 298 5 111 5 908.78 5 5.95 91.2% 5 1 Souleit A-180 155 5 6.46 5 108.175 5 9.87 45.3% 10 2 Letter Value D-067 482 5 1.001.26 5 4.85 73.3% 11 | | 3 | | | 357 | 5 1.57 | \$ | | | 67.8% | | | | |
| 5 1 5-baim A-182 155 5 6.45 5 0.66.75 5 9.85 45.3% 10 2 LAMAF Valve 0x467 482 5 4.05 5 1.052.82 5 8.95 33.3% 11 13 4.44 Mark 14 | | 3 | Finiey Sprocket: 6" Senotube | C-098 8-111 | 357 | 5 1.57 | 2 4 4 | 560.48 | \$ 2.95 \$ 19.95 | 67.8% 30.8% | - | | | |
| 20 2 LANAFVARNA D-0607 482 5 4.00 5 1.902.82 5 4.95 73.2% 21 23 4 + F Rank, Hend2 Head3, Yz | | 3 2 4 | Finley Sprocket: 6" Senatube Langztrom 7" Wranch | C-098 8-111 D-067 | 357 66 75 | 5 157 5 15.24 | 2 4 4 5 | 560.48 | \$ 2.95 \$ 19.95 | 67.8% 30.8% 49.5% | | | | |
| 12 13 14 + F. Rate, /Bent2_Bent3_/T4 | 5 6 7 8 | 3 2 4 3 | Finley Sprocket: 6" Senotube Langstrom 7" Whench Thompson Sociat | C-000 8-111 D-067 C-125 | 357 66 75 296 | 5 157 5 15.24 5 16.68 5 3.13 | 2 4 4 4 4 4 | 568.48 1.518.64 1.401.75 926.78 | \$ 2.95 \$ 19.95 \$ 27.95 \$ 5.95 | 87.8% 30.8% 49.5% 91.3% | | | | |
| 13 H 4 F F Refs / Res2 / Res3 / S2 | 5 6 7 8 | 3 2 4 3 1 | Finley Sprocket: 6" Senotube Langstrom 7" Whench Thompson Sociat 5-Jaint | C-000 8-111 D-067 C-125 | 357 66 75 296 | 5 157 5 15.24 5 16.68 5 3.13 | ~ ~ ~ ~ ~ ~ ~ ~ | 568.48 1.518.64 1.401.75 926.78 | \$ 2.95 \$ 19.95 \$ 27.95 \$ 5.95 | 87.8% 30.8% 49.5% 91.3% | | | | |
| HARR Back Reall For 4 | 5 6 7 8 5 | 3 2 4 3 1 2 | Finley Sprocket: 6" Senotube Langstrom 7" Whench Thompson Sociat 5-Jaint | C-098 8-115 D-067 C-325 A-382 | 357 66 75 296 155 | 5 157 5 15.24 5 18.63 5 111 5 6.65 | ~ ~ ~ ~ ~ ~ ~ ~ ~ | 588.49 1.318.64 1.401.75 526.78 1.061.75 | \$ 2.95 \$ 19.95 \$ 27.95 \$ 5.95 \$ 5.95 | 87.8% 30.8% 49.5% 91.3% 45.3% | | | | |
| | 5 6 7 8 9 10 | 5 3 4 3 1 2 | Finley Sprocket: 6" Senotube Langstrom 7" Whench Thompson Sociat 5-Jaint | C-098 8-115 D-067 C-325 A-382 | 357 66 75 296 155 | 5 157 5 15.24 5 18.63 5 111 5 6.65 | ~ | 588.49 1.318.64 1.401.75 526.78 1.061.75 | \$ 2.95 \$ 19.95 \$ 27.95 \$ 5.95 \$ 5.95 | 87.8% 30.8% 49.5% 91.3% 45.3% | | | | |
| | 5 6 7 8 5 10 11 11 | 5 2 4 3 1 2 | Finley Sprocket #"Senotube Langstrom ?" Whench Thompson Sociat S-Jaint LAMS Valve | C-098 B-113 D-067 C-125 A-192 B-069 | 357 66 75 296 155 | 5 157 5 15.24 5 18.63 5 111 5 6.65 | ~ ~ ~ ~ ~ ~ ~ ~ ~ | 548.49 1.518.64 1.40175 926.78 1.06175 1.902.82 | \$ 2.95 \$ 19.95 \$ 27.95 \$ 5.95 \$ 5.95 | 87.8% 30.8% 49.5% 91.3% 45.3% | | | | |

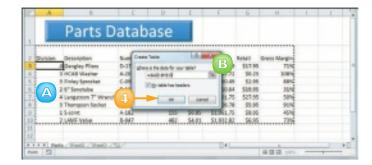
The Create Table dialog box appears.

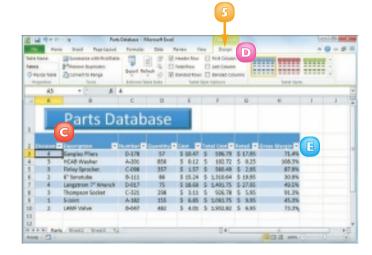
- A Excel selects the range that it will convert to a table.

Click **OK**.

Excel converts the range to a table.

- Excel applies a table format to the range.
- The Table Tools contextual tab appears.
- E AutoFilter drop-down lists appear in each field heading.
- Click the **Design** tab to see Excel's table design tools.





To add a record to the end of a table, click inside the table, press ctrl + and then ctrl + to to move to the last field in the last record and then press cab. To add a record within the table, right-click the record above where you want to insert the new record, click Insert and then click Table Rows Above. If you no longer require the table tools, you can convert the table back into a regular range. Select any cell within the table, click the Design tab and then click Convert to Range (). When Excel asks you to confirm, click Yes. Excel removes the AutoFilter dropdown lists and hides the Table Tools contextual tab.

CREATE A DATA TABLE

If you are interested in studying the effect a range of values has on a formula, you can set up a *data table*. This is a table that consists of the formula you are using and multiple input values for that formula. Excel automatically creates a solution to the formula for each different input value.

Do not confuse data tables with the Excel tables that you learned about in "Convert a Range to a Table." A data table is a special range that Excel uses to calculate multiple solutions to a formula.

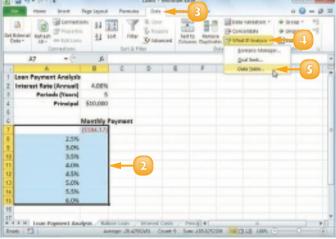
Type the input values:

To enter the values in a column, start the column one cell down and one cell to the left of the cell containing the formula, as shown here.

To enter the values in a row, start the row one cell up and one cell to the right of the cell containing the formula.

- 2 Select the range that includes the input values and the formula.
- 3 Click the **Data** tab.
- 🕢 Click What-If Analysis (🖃).
- Click Data Table.

| | A | | | D | 1.0 | T. | G | 14 | 1.00 | | Т |
|-----|--|--------------|----------|---------|-----------|-----------|---|-----------|------|---------|---|
| L | oan Payment Ana | ilysis | | | | | | | | | |
| | Interest Rate (Annual) | | | | | | | | | | |
| | Pariada (Veses) | | | | | | | | | | |
| 2 | Principal | | | | | | | | | | |
| | | | | | | | | | | | |
| 2 | | Monthly | Payment. | | | | | | | | |
| | | (\$184.17) | | | | | | | | | |
| | 2.58 | - | | | | | | | | | |
| 1 | 3.0% | | | | | | | | | | |
| 0 | 3.5% | | | | | | | | | | |
| 1 | 4.0% | | | | | | | | | | |
| 2 | 4.58 | | | | | | | | | | |
| 0 | 5.09 | | | | | | | | | | |
| 4 | 5.5% | | | | | | | | | | |
| 6 | 6.09 | | | | | | | | | | |
| 6 | | | | | | | | | | | |
| τ., | The second s | - | | | - | - | | | | _ | _ |
| | H Loan Payment Pag | NAME C. 1943 | N SOME Y | PREMIS | MR. 7 PA | CODE LA L | | 1 IS 1891 | 0 | -0 | 1 |
| - | | | _ | _ | _ | | _ | 4 (B 1000 | 0 | | |
| | | | | | | | | | | | |
| | _ | | | | | | | | | | |
| | | | | | | | | | | | |
| 16 | 1-11-11-14 | | | Lmans - | Moreall & | and a | | | | and the | - |
| _ | Plane least | Page Learnit | Permit | a Date | | 3 | | | | 0- | - |



The Data Table dialog box appears.

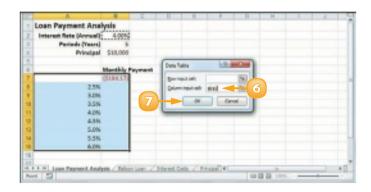
Specify the formula cell you want to use as the data table's input cell:

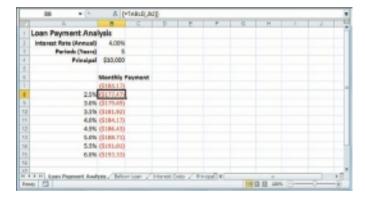
> If the input values are in a column, enter the input cell's address in the Column input cell text box.

If you entered the input values in a row, enter the input cell's address in the Row input cell text box.

🕖 Click **OK**.

Excel displays the results.





The technique called what-if analysis is perhaps the most basic method for analysing worksheet data. With what-if analysis, you first calculate a formula D, based on the input from variables A, B and C. You then say, "What happens to the result if I change the value of variable A?", "What happens if I change B or C?", and so on.

Data table results are created as an array formula, which is a special formula that Excel treats as a unit. This means that you cannot move or delete part of the results. If you need to work with the data table results, you must first select the entire results range.

SUMMARISE DATA WITH SUBTOTALS

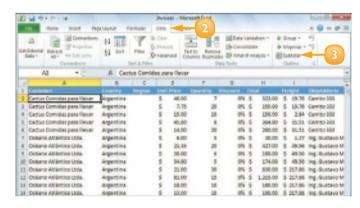
When you need to summarise your data, Excel offers a feature that enables you to quickly and easily add subtotals to a range of data.

Although you can use formulas and worksheet functions to summarise your data in various ways, including sums, averages, counts, maximums, and minimums, if you are in a hurry, or if you just need a quick summary of your data, you can get Excel to do most of the work for you. The secret here is a feature called *automatic subtotals*, which are formulas that Excel adds to a worksheet automatically.

 Click a cell within the range you want to subtotal.

| Cardonaet | Louist Contractor | | | | | | | | | |
|------------------------------|-------------------|-----|--------|----|-----------|----|------------|-----|--------|------------------|
| Cartha Carnidas para llevar | | 4 | 46.00 | 3 | 0% | 1 | 100.00 | 1 | 10.76 | Carvits 333 |
| Cashus Comolas para Tever | Aspectics | | 2.75 | 28 | olis | | 110.00 | 1 | 15.76 | Carville 115 |
| Castus Camadas para llevar | Algentina | . 8 | 18.00 | 18 | oN | 8 | 150.00 | 5 | 2.84 | Careful 335 |
| Carbus Considias para Tlevar | Argantina | 5. | 45.60 | | 0% | 5 | 364.80 | 5 | 11.53 | Carwise 333 |
| Cattus Comidas para llevar | Argentina | \$ | \$4.00 | 28 | 0% | S. | 288.60 | \$ | 11.51 | Carrity 335 |
| Ooleno-Atlántico-Utile. | Aspantina | 5 | 8.00 | 5 | - 0% | 5 | 38.80 | 5 | 1.27 | ing, Gustaire M |
| Goleno-Atlántico-Utila. | Aspectina | \$ | 25.85 | 28 | 056 | \$ | 427.00 | 5 | 49.56 | ing Guttave M |
| dokeno Atlántico utita. | Aspectine | \$ | 10.00 | | 6% | 5 | 180.00 | 5 | 49.58 | ing, dustaive M |
| Clokene Atlantice Utila. | Aspentina | 1 | 34,80 | | 0% | 1 | 176.00 | 1 | 49.36 | ing, builtave nr |
| 1 Ookame Atlantice Usla. | Angentina | | 21.00 | 30 | ON | | 480.00 | 1 | 227.88 | Ing. Ouslane M |
| 2 Goéane Atlântice Utila | Aspentina | 6 | 81.00 | 18 | ols | \$ | 1,215.00 | 5. | 217.86 | ing. Gustave M |
| 1 Gotane Atlàntice Unia- | Argentina | 5 | 18.00 | 10 | 0% | 8 | 130.00 | 5.3 | 117.86 | ing Gostaire M |
| Oolano-Atlántico-Utita. | Argantina | \$ | 13.00 | 15 | 0% | \$ | 195.00 | 51 | 117.86 | ing Gustave M |
| 5 Rancho grande | Aspantina | 5 | 81.00 | 5 | 0% | 5 | 405.00 | 5 | 90.85 | An, del Liberta |
| Kancho grande | Aspectina | \$ | 268.50 | 2 | 0% | 5 | 527.00 | 5 | 90.85 | As, del Liberta |
| 7 Rancho grande | Aspectica | \$ | 17.45 | | 0% | 5 | 101.70 | s. | 68.57 | As, del Liberta |
| I mancho grande | Aspectora | 1 | 12.00 | | ohi | 1 | 110.00 | 1 | 66.77 | An. del Liberta |
| Ramcho grande | Angentina | 8 | 18.80 | 28 | ohi | 8 | \$80.00 | 8 | 48.77 | An. del Ulterta |
| 0 Event manufel | Auchria | . 6 | 21.00 | 52 | 0% | 5 | 1,092.80 | 5. | 411.88 | Kinthgasse 6 |
| | d and all a | | 18.00 | | | | 1.541 (55. | 2. | | Windowson H |

- 2 Click the **Data** tab.
- 3 Click Subtotal ().



The Subtotal dialog box appears.

- Click the At each change in and then click the column you want to use to group the subtotals.
 - In the Add subtotal to list, click the check box for the column you want to summarise (changes to).
- Olick OK.
 - Excel calculates the subtotals and adds them into the range.
 - B Excel adds outline symbols to the range.

| | | | 6 | - | 8 | | 9. | 11 | T | 1 | |
|------|---------------------------------|-----------|--------|-----|--------|------------|-----------|-------------|-----|---------|-------------|
| 1 | Cardonner | Country | Region | 187 | e mice | Quartery 1 | incount . | TOTAL | | ewight. | 3041 |
| . 1 | Cashus Convicted parts Never | Aspectica | | - 3 | 46.00 | 7 | 0% | \$ 100.0 | 6 5 | 19.76 | CHIE |
| 1 3 | Calify Connotae parts Dever | Aspentona | | 1 | 3.15 | 20 | ohi | \$ 130.0 | 0 5 | 12.76 | CHE |
| - 4 | Cashys Comidae para Never | Argentina | | | 18.00 | 10 | ols | \$ 130.0 | 0 1 | 2.84 | Certi |
| • 3 | Cashus-Cernelas para llevar | Argentina | | 8 | 43.60 | | oN | 5 384.8 | 0.8 | 34.83 | Certi |
| . 18 | Caetus Cernidas para llevar | Aspentina | | 5 | 54.00 | 20 | 1 | 288.0 | 0.5 | 14.51 | Care |
| | Cartus-Caroldas para Bevar T | lotal | | | | | | L27LA | 5 | | |
| 1 3 | Optiano Atlántico Utita. | Aspantina | | 5 | 6.00 | 5 | | 31.0 | 0 5 | 1.27 | ing i |
| 1.3 | Golano Atlantico unte. | Aspantina | | 5 | 21.15 | 28 | - 0% | 5 407.0 | 0.5 | 49.56 | ing. i |
| 1 2 | Golano Arkintico utita. | Aspectina | | \$ | 18L00 | 6 | - 6% | \$ 180.00 | 6.5 | 49.56 | ing. |
| . 1 | dolano.atlántico.ttá. | Aspectina | | \$ | 94.90 | 5 | 054 | \$ 174.0 | 6 5 | 49.56 | ing. |
| 1 1 | Coleno attantico utita. | Aspertona | | | 21.00 | 300 | 0% | \$ 400.0 | 0 5 | 317.00 | Ing. (|
| . 1 | Coloro Miléritor Unia. | Aspectica | | | 81.00 | 10 | oN | \$ 1,225.00 | 5 8 | 317.06 | Ing. I |
| · 1 | Oolano.Atlantico Ubla. | Argentona | | 8 | 18.00 | 10 | ohi | \$ 180.0 | 2.8 | 317.06 | ing.t |
| · 1 | Gotane attantice unta- | Aspentina | | 5 | 11.00 | 15 | 1 | 195.0 | 5 5 | 217.86 | ing. I |
| 1 | Golumo. Athletiloo Utila. Tatal | | | | | | | 1,000.0 | 5 | | |
| • 1 | Ranche grande | Argantina | | 5 | 81.00 | 5 | | 405.0 | 0 5 | 99.85 | An e |
| 1 1 | Rancho grande | Aspentine | | 5 | 263.50 | 2 | -0% | 5 527.0 | 0 5 | 20.85 | An o |
| | Aancho grande | Aspertona | | \$ | 17.45 | | oN | 5 104.7 | 0 5 | 40.77 | An. o |
| | Rancho grande | Aspectica | | \$ | 83.00 | 6 | 0% | \$ 190.0 | 0 5 | 48.77 | Art. 0 |
| | Rancho grande | Aspectina | | 4 | 18.50 | 20 | - | 100.0 | 6 5 | 48.77 | ALL G |
| | Rancho grande total | | | | | | | L SER. T | | | |

 \checkmark

Excel sets up automatic subtotals based on data groupings in a selected field. For example, if you ask for subtotals based on the Customer field, Excel runs down the Customer column and creates a new subtotal each time the name changes. To get useful summaries, then, you need to sort the range on the field containing the data groupings you are interested in. The word "subtotal" is a bit misleading because you can summarise more than just totals. You can also count values, calculate the average of the values, determine the maximum or minimum value, and more. To change the summary calculation, follow Steps I to 4, click the Use function \square and then click the function you want to use for the summary.



- S- ----

itaach channel

CONTENTS

- 166 Examining Chart Elements
- 167 Understanding Chart Types
- 68 Create a Chart
- Add Chart Titles
- Add Data Labels
- 172 Position the Chart Legend
- **173** Display Chart Gridlines
- **174** Display a Data Table
- 175 Change the Chart Layout and Style
- **176** Format Chart Elements
- 178 Customise a Chart Element Background
- 180 Set a Chart Element's Outline
- 182 Add Effects to a Chart Element
- 184 Apply a Style to a Chart Element



VISUALISING DATA WITH EXCEL CHARTS

You can take a worksheet full of numbers and display them as a chart. Visualising your data in this way makes the data easier to understand and analyse. To help you see your data exactly the way you want, Excel offers a wide variety of chart types, including pie charts, column charts and stock charts. Excel also offers a large number of chart options that enable you to add chart titles and data labels, control the chart legend and gridlines, format the chart layout and style, change the chart type and format chart elements.



EXAMINING CHART ELEMENTS

A *chart* is a graphic representation of spreadsheet data that uses columns, points, pie wedges, and other forms to represent numbers from a range. As the data in the spreadsheet changes, the chart also changes to reflect the new numbers. To get the most out of charts, you need to familiarise yourself with the basic chart elements.

🔼 Plot Area

The area bounded by the category and value axes. It contains the data points and gridlines.

Category Axis

The axis (usually the X axis) that contains the category groupings.

Colue Axis

The axis (usually the Y axis) that contains the data values.

Chart Title

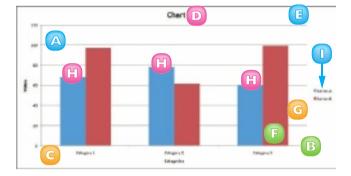
The title of the chart.

Gridlines

Optional horizontal and vertical extensions of the axis tick marks. These make data values easier to read.

Data Value

A single piece of data. Also called a *data* point.



G Data Marker

A symbol that represents a specific data value. The symbol used depends on the chart type.

Data Series

A collection of related data values. Normally, the marker for each value in a series has the same pattern.

🕕 Legend

A guide that shows the colours, patterns, and symbols used by the markers for each data series.

UNDERSTANDING CHART TYPES

Excel offers 11 different types of chart, including column charts, bar charts, line charts, and pie charts. The chart type you use depends on the type of data and how you want to present that data visually. Although you must select a particular chart type when you first construct your chart, you can quickly and easily change to a different chart type later on if you need to.

| Chart Type | Description |
|------------|--|
| Area | A chart that shows the relative contributions over time that each data series makes to the whole picture. |
| Bar | A chart that compares distinct items or shows single items at distinct intervals. A bar chart is laid out with categories along the vertical axis and values along the horizontal axis. |
| Bubble | A chart with three data series; in the third series, the individual plot points are displayed as bubbles (the larger the value, the larger the bubble). It is similar to an XY chart. |
| Column | A chart that, like a bar chart, compares distinct items or shows single items at distinct intervals. However, a column chart is laid out with categories along the horizontal axis and values along the vertical axis. |
| Doughnut | A chart that, like a pie chart, shows the proportion of the whole that is contributed by each value in a data series. The advantage of a doughnut chart is that you can plot multiple data series. |
| Line | A chart that shows how a data series changes over time. The category (X) axis usually represents a progression of even increments (such as days or months) and the series points are plotted on the value (Y) axis. |
| Pie | A chart that shows the proportion of the whole that is contributed by each value in a single data series. The whole is represented as a circle (the "pie"), and each value is displayed as a proportional "slice" of the circle. |
| Radar | A chart that makes comparisons within a data series and between data series relative to a centre point. Each category is shown with a value axis extending from the centre point. |
| Stock | A chart that is designed to plot stock market prices, such as a stock's daily high, low and closing values. |
| Surface | A chart that analyses two sets of data and determines the optimum combination of the two. |
| XY | A chart that shows the relationship between numeric values in two different data series. It can also plot a series of data pairs in XY coordinates. It is also called a scatter chart. |

CREATE A CHART

You can create a chart from your Excel worksheet data with just a few mouse clicks. As shown in "Understanding Chart Types," Excel comes with 11 main chart types. However, each of these types has several predefined varieties, so in all Excel offers more than 70 default chart configurations, which means there should always be a type that best visualises your data.

Regardless of the chart type you choose originally, you can change to a different chart type at any time.

- Select the data that you want to visualise in a chart.
- s By Division January February March A \$23,500 \$23,000 \$24,000 West \$28,750 \$27,900 \$29,500 \$24,400 \$24,300 \$25,25 FAR ALL AND AND AND AND A CALL AN
- If your data includes headings, be sure to include those headings in the selection.

- Click the **Insert** tab.
- Click a chart type.

| K) | 1 4×0 | | | 2 | | Salan - Microsoft B | | | | | | 1010 | - |
|----|----------|----------|-----------|----------|------------------------|---------------------|-----------------|----------------|---|---|-----------------|--------------------|-----|
| | | | | 2) | Date | Rates line | | | | | | - 9 | P 3 |
| 1 | itee tee | | A Distant | a data | Bra - Deta - Ora | Dine Data | 10 Sportfrom | State 7 Mar | - | A | Tastr A form | 4 10 3 10 10 | |
| | 42 | | - A | | | | | | | | | | |
| | | | e | Ó | | | 4 | × | | | 1 | | |
| 1 | Sales | By Div | Islon | | | | | | | | | | |
| 1 | | January | February | March | | | | | | | | | |
| 1 | Cent : | \$23,500 | \$23,000 | \$24,000 | | | | | | | | | |
| 4 | West : | \$28,750 | \$27,900 | \$29,500 | | | | | | | | | |
| \$ | North : | \$24,400 | \$24,300 | \$25,250 | | | | | | | | | |
| | | | | | | | | | | | | | |
| ×. | | | | | | | | | | | | | |

68

Excel displays a gallery of configurations for the chart type.

Click the chart configuration you want to use.



ales By Division January February March \$23,500 \$23,000 \$24,000 105,000 East West \$28,750 \$27,900 \$29,500 100.000 North \$24,400 \$24,300 \$25,250 525,000 100,000 \$15,000 113.505 15, 100 inc. and Read Tol 101 Date Date / Tol Annung: 2001-2002 (sunt 11 Sam 2000)

Excel inserts the chart.



You can create a chart on a special workbook sheet called a chart sheet. Select the worksheet data, right-click any worksheet tab and then click Insert to display the Insert dialog box. Click the General tab, click Chart and then click OK. Excel creates a new chart sheet and inserts the chart.

ADD CHART TITLES

You can make your chart easier to read and easier to understand by adding one or more titles to the chart.

You can add a *chart title*, which appears at the top of the chart and is usually a word or short phrase that describes the chart data. You can also add titles to the chart axes. The *primary horizontal axis title* is a title that appears below the chart's category (X) axis; the *primary vertical axis title* is a title that appears the left of the chart's value (Y) axis.

- Click the chart.
- 2 Click the **Layout** tab.
- 3) Click **Chart Title** (🗐).
- Click Above Chart.
 - A Excel adds the title area.
- 3 Type the title.
- 🙆 Click Axis Titles (国).
- Click Primary Horizontal Axis Title.
- 8 Click **Title Below Axis**.
 - B Excel adds the title area.
- O Type the title.
- 🔟 🛛 Click 🔟.
- Click **Primary Vertical Axis Title**.
- D Click Rotated Title.
 - Excel adds the title area.

Type the title.





ADD DATA LABELS

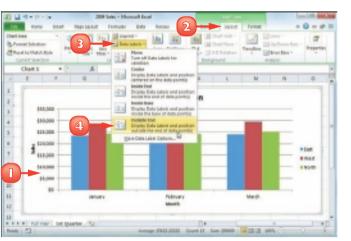
You can make your chart easier to read by adding data labels. A *data label* is a small text box that appears in or near a data marker and displays the value of that data point.

Excel offers several position options, which depend on the chart type, for the data labels. For example, with a column chart you can place the data labels within or above each column and for a line chart you can place the labels to the left, right, above or below, the data marker.

- Click the chart.
- 2 Click the **Layout** tab.
- 3 Click Data Labels (I).
- Click the position you want to use for the data labels.

Note: Remember that the position options you see depend on the chart type.

Excel adds the labels to the chart.





POSITION THE CHART LEGEND

The chart *legend* is a box that appears alongside the chart and serves to identify the colours associated with each data series in the chart. By default, the legend appears to the right of the chart's plot area but you might prefer a different location.

For example, you might find the legend easier to read if it appears to the left of the chart. Alternatively, if you want more horizontal room to display your chart, you can move the legend above or below the chart.

- Click the chart.
- 2 Click the **Layout** tab.
- 3 Click **Legend** (I).
- Click the position you want to use for the legend.





Excel moves the legend.



CHAPTER 9 VISUALISING DATA WITH EXCEL CHARTS

DISPLAY CHART GRIDLINES

You can make your chart easier to read and easier to analyse by adding gridlines. Horizontal gridlines extend from the vertical (value) axis and are useful with area, bubble, and column charts. Vertical gridlines extend from the horizontal (category) axis and are useful with bar and line charts.

Major gridlines are gridlines associated with the *major units*: the values you see displayed on the vertical and horizontal axes; *minor gridlines* are gridlines associated with the *minor units*: values between each major unit.

- Click the chart.
- Click the Layout tab.
- 3 Click **Gridlines** (III).
- Click Primary Horizontal Gridlines.
- Click the horizontal gridline option you prefer.
 - Excel displays the horizontal gridlines.
- 👩 🛛 Click 🗔.
- Click Primary Vertical Gridlines.
- 8 Click the vertical gridline option you prefer.
 - B Excel displays the vertical gridlines.





DISPLAY A DATA TABLE

You can make it easier for yourself and others to interpret your chart by adding a data table. A *data table* is a tabular grid where each row is a data series from the chart, each column is a chart category and each cell is a chart data point.

Excel gives you the option of displaying the data table with or without *legend keys*, which are markers that identify each series.

Click the chart.

B

- Click the **Layout** tab.
- Click Data Table (I).
- Click Show Data Table with Legend Keys.
 - If you prefer not to display the legend keys, click Show Data Table.
 - Excel adds the data table below the chart.







CHANGE THE CHART LAYOUT AND STYLE

You can quickly format your chart by applying a different chart layout and a different chart style. The chart layout includes elements such as the titles, data labels, legend, gridlines, and data table. Excel's Quick Layouts feature enables you to apply these elements in different combinations with just a few mouse clicks. The chart style represents the colours used by the chart data markers and background.

- Click the chart.
- 2 Click the **Design** tab.
- 3 Click Quick Layout (Image).
- Click the layout you want to use.Excel applies the layout.
- 🜀 🛛 Click the Chart Styles 🗔
- 6 Click the chart style you want to use.

Excel applies the style to the chart.





175

FORMAT CHART ELEMENTS

You can customise the look of your chart by formatting the various chart elements. These elements include the axes, titles, labels, legend, gridlines, data series, plot area (the area where the chart data appears) and the chart area (the overall background of the chart).

You can format chart elements using either the Format dialog box or the Ribbon. The rest of the sections in this chapter provide you with more detail on using the Ribbon commands.

Format Chart Elements Using the Format Dialog Box

- Click the chart element you want to format
- Click the **Format** tab.

Note: You can also select a chart element by clicking the **Chart Title** and then clicking the object.

Click Format Selection ().

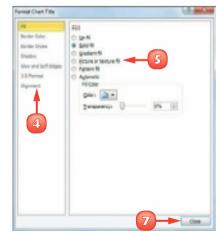
The Format dialog box appears for the object you selected. Here, it is the Format Chart Title dialog box.

- Click a tab.
- Change the formatting options.
- Repeat Steps 4 and 5 to set other 6 formatting options.



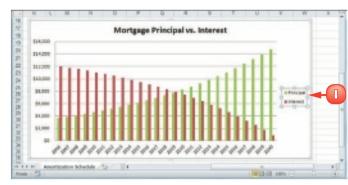
Excel applies the formatting.





Format Chart Elements Using the Ribbon

Click the chart element you want to format.





Use the Ribbon controls to change the formatting options.

Note: Not all of the Ribbon controls are available for each chart element.

Excel applies the formatting.



 \checkmark

Excel offers several methods for opening the Format dialog box. If you are using your mouse, position ▷ over the element you want to format and double-click. With the chart element selected, you can press cm +1 on the keyboard. You can also rightclick the chart element and then click Format Element (where Element is the name of the element). The easiest way to be sure you are clicking the correct chart element is to position \triangleright over the object. If \triangleright is positioned correctly, a banner appears and the banner text displays the name of the chart element. If the banner does not appear or if the banner displays a chart element name other than the one you want to format, move \triangleright until the correct banner appears.

CUSTOMISE A CHART ELEMENT BACKGROUND

You can add visual interest to a chart element by customising the element's background, or what Excel calls the *fill*.

Most fills consist of a single colour but you can also apply a colour gradient, a texture, or even a picture. However, you should be careful about the background you choose for certain chart elements. Since some chart elements – particularly the chart area, plot area, value axis and category axis – display data, be sure to choose a background that does not make that data difficult to read.

Apply a Colour Fill

- Click the chart element you want to format.
- Click the Format tab.
- Click the Shape Fill .
- Click the colour you want to apply.



Excel formats the element's background with the colour you selected.



Apply a Gradient Fill

- Click the chart element you want to format.
- 2 Click the **Format** tab.
- 🛐 Click the Shape Fill 🗔.
- Olick Gradient.
- Click the gradient you want to apply.

Excel formats the element's background with the gradient you selected.

Apply a Texture Fill

- Click the chart element you want to format.
- 2 Click the **Format** tab.
- 3 Click the Shape Fill 🗔.
- Olick Texture.
- Click the texture you want to apply.

Excel formats the element's background with the texture you selected.

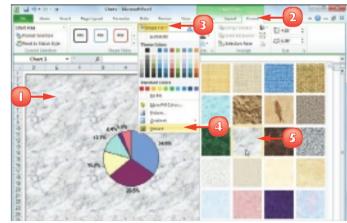
Apply a Picture Fill

- Click the Shape Fill I for the chart element you want to format.
- 2 Click **Picture**.
- Click the folder that contains the image file.
- 4 Click the image file you want to use as the background.



Click Insert.







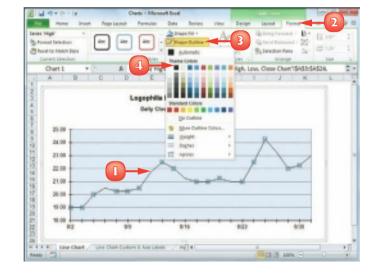
CHAPTER 9 VISUALISING DATA WITH EXCEL CHARTS

SET A CHART ELEMENT'S OUTLINE

You can make a chart element stand out by customising the element's outline, which refers to the border that appears around the element as well as to single-line elements, such as gridlines and axes.

You can customise the outline's colour, its weight – that is, its thickness – and whether the line is solid or consists of a series of dots or dashes.

- Click the chart element you want to format.
- 2 Click the **Format** tab.
- 3 Click the Shape Outline .
- Click the colour you want to apply.



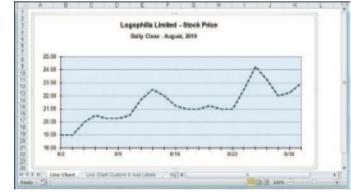
- 🗿 Click the Shape Outline 🗹.
 - Click Weight.
- 7 Click the line thickness you want to apply.



- 8 Click the Shape Outline .
- Olick **Dashes**.
- Click the line style you want to apply.

Excel formats the element's outline with the colour, weight, and style you selected.

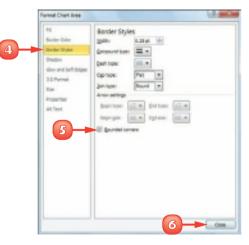




Apply a Rounded Outline to a Chart

- Click the chart border to select the chart area element.
- 2 Click the **Format** tab.
- 3 Click Format Selection ()).
- Click the Border Styles tab.
- Click Rounded corners
 (changes to).





ADD EFFECTS TO A CHART ELEMENT

You can make your chart elements more visually striking by customising them with special effects.

For most chart elements, you can add one or more effects, including a shadow, glow, soft edges, or bevel. In all cases, however, make sure that the effects you apply do not make the element more difficult to read or decipher, and that the effects you use do not distract the reader from the chart itself.

Add a Shadow Effect

- Click the chart element you want to format.
- 2 Click the **Format** tab.
- Click the Shape Effects 🔄.
- 4 Click Shadow.
- Click the shadow effect you want to apply.
 - A Excel formats the element with the shadow you selected.

Add a Glow Effect

- Click the chart element you want to format.
- 2) Click the **Format** tab.
- 3) Click the Shape Effects 🔄.
- Olick Glow.
- Click the glow effect you want to apply.
 - B Excel formats the element with the glow you selected.





CHAPTER 9 VISUALISING DATA WITH EXCEL CHARTS

Add a Soft Edges Effect

- Click the chart element you want to format.
- 2 Click the **Format** tab.
- Click the Shape Effects .

Click Soft Edges.

5

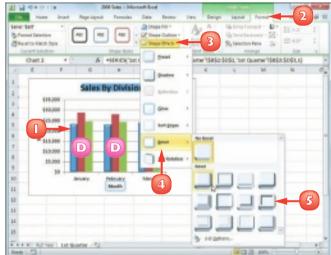
- Click the soft edges effect you want to apply.
 - G Excel formats the element with the soft edges you selected.

Add a Bevel Effect

- Click the chart element you want to format.
- 2 Click the **Format** tab.
- 🛐 Click the Shape Effects 🗔.
- 4 Click Bevel.
- Click the bevel effect you want to apply.
 - Excel formats the element with the bevel you selected.

Excel offers several controls that enable you to manually adjust various aspects of the shadow. In the list of shadows, click Shadow Options. Use the Size spin box to increase the size of the shadow and the Distance spin box to increase the space between the chart element and the shadow. Click Close when you are done.





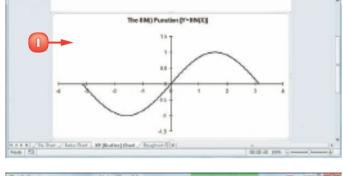
APPLY A STYLE TO A CHART ELEMENT

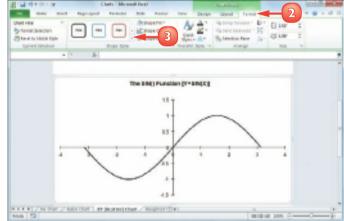
You can reduce the time it takes to format a chart element by applying a style to that element. Excel comes with more than 40 predefined element styles, each of which is a collection of chart formatting features.

Each style includes one or more of the following formatting features: a background, which is usually either a solid colour or a colour gradient; an outline, which is usually a solid line with a colour that matches or complements the background; and one or more special effects, such as a shadow or bevel.

Click the chart element you want to format.

- 2 Click the **Format** tab.
 - Click the Shape Styles 🗟.



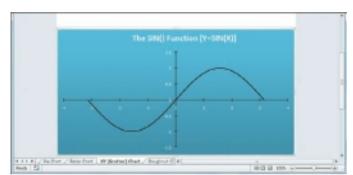


Excel displays the Shape Styles gallery.

Click the style you want to apply.

Z 14 7 Chart Heat 2 Stand is thick like fan | 10 | Aur --

Excel applies the style.



STOP Excel does not offer a simple method for removing a style from a chart element. You must remove the background, outline and effects individually. To begin, click the chart element you want to work with and then click the Format tab. For the background, click the Shape Fill I and then click No Fill. For the outline, click the Shape Outline 🖸 and then click No Outline. For the special effects, click the Shape Effects , click Preset and then click No Presets.

CONTENTS

- 188 Add a Comment to a Cell
- **190** Protect a Workbook
- 192 Share a Workbook with Other Users
- 194 Track Workbook Changes
- 196 Accept or Reject Workbook Changes
- 198 Make a Workbook Compatible with Earlier Versions of Excel
- 200 Collaborate on a Workbook Online



COLLABORATING WITH OTHER PEOPLE

Although you will most often create and edit an Excel workbook on your own, you may have some workbooks that require input from other people. For the times when you need to collaborate with other people on a workbook, Excel has the tools to get the job done.

In this chapter, you learn many ways to collaborate on a workbook, including adding comments to a cell, sharing a workbook and working on a spreadsheet online. You also learn ways to make collaboration safer by protecting any data you do not want changed, tracking changes that are made by others and accepting or rejecting those changes.



ADD A COMMENT TO A CELL

If you have received a workbook from another person, you can provide feedback to that person by adding a comment to a cell in the workbook. A comment is often the best way to give feedback because it does not change anything on the worksheet itself.

Comments are attached to a particular cell and Excel displays an indicator on any cell that has a comment. When you hover your mouse pointer over such a cell, Excel displays the comment in a balloon.

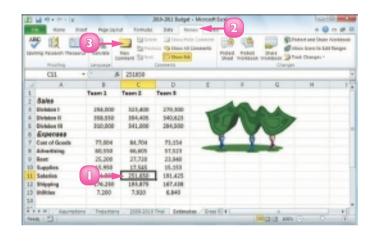
Add a Comment

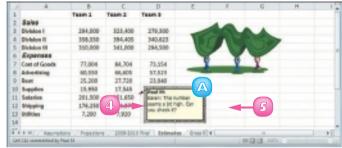
- Click the cell you want to comment on.
- Click the **Review** tab.
- Click **New Comment** (**D**).

Note: You can also right-click the cell and then click **Insert Comment**

Excel displays a comment balloon.

- Excel precedes the comment with your Excel user name.
- Type your comment.
- Click outside the comment balloon



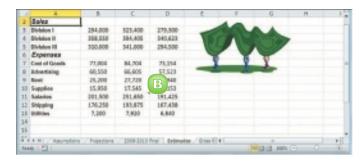


To remove a comment, click the cell that contains the comment. click the Review tab and then click Delete ()).



STOP If you change your user name, it does not change your user name in any existing comments.

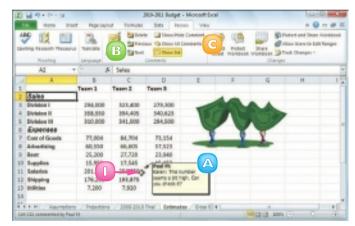
Excel adds a comment indicator (
to the top right corner of the cell.



View a Comment

👖 Move the mouse 🗘 over the cell.

- Excel displays the comment in a balloon.
- In the **Review** tab, you can click **Next** (a) and **Previous** (a) to run through the comments.
- In the Review tab, you can also click Show All Comments () to display every comment at once.



To edit an existing comment, click the cell that contains the comment, click the Review tab, click Edit Comment () to open the comment in a balloon and then edit the balloon text. Your user name is important because it tells other people who added the comments. To change it, click File and then click Options to open the Excel Options dialog box. Click the General tab and then use the User name text box to edit the name. Click OK.

PROTECT A WORKBOOK

If you will be distributing a workbook to other people, you can enable Excel's options for safeguarding worksheet data by activating the sheet's protection feature. You can also prevent unwanted changes to a workbook by activating protection for its windows and structure. You can configure the worksheet and workbook to require a password to unprotect them. There are two main methods you can use to safeguard worksheet data: you can unlock only the cells that users are allowed to edit and you can configure a range to require a password before it can be edited.

Protect a Worksheet's Data

- Display the worksheet you want to protect.
- 2 Click the **Review** tab.
- 3) Click **Protect Sheet** (**D**).

Excel displays the Protect Sheet dialog box.

- Make sure the Protect worksheet and contents of locked cells check box is activated (*I*).
- Use the Password to unprotect sheet text box to type a password, if required.
- Click OK.

If you specified a password, Excel asks you to confirm the password.

| N | | 3 | 🗀 ku t | Tala Tara | han a fam | | | | *** |
|-----|------------------------|--------------|----------------------|--------------|----------------|-------------|---------------------------------|------------------|------|
| | 06.0 | - A | -PMT (Skicket) | 9035.5854,5 | ada contra | | Protect Chart | C. B. and Cont | |
| | A | 0 | 6 | D | (4)- | | 77 Protect - original and po | dia tabaha dinan | - |
| 1 | Loan Data | | | | | | Descend to operated sheet | | |
| 2 | Internet Rate | 6.80% | Time Seels | HARY T | 4 | Tinel | Concession of the second | 5 | |
| L | Amortization | 25 | Time Rector | 12 | | Annual | | | |
| 4 | Principal | \$\$90,900 | Adjusted hree | 0.5% | | Sami-A | Algo all uses of this sectories | and the | |
| 8 | Bollows Payment | 90 | Total Pariads | 180 | | Dark | Select uniociations | | |
| 6 | Payment Type | Đ. | | | | Manéh | | | |
| Т | | | | | | | Annatosiuma | X | |
| 8 | Amertigation 5 | khedule | | | | | Parenti-parts | | |
| 1 | Partial | Paymant | Printed | Internet | Constative | Cares | Deer Lisera Insert hyperieks | 1 | |
| 10 | 1 | GUILLIN. | (\$1.717.18) | (53.508.00) | 6 | 150.0 | Desire columns | | |
| ٥. | 1 | 64/11/18 | (\$1.77 L MI) | (\$2,490,40) | 0 | (54.9 | | | |
| ti, | 2 | 64.03.09 | (\$1.726.54) | (32.482.75) | (55,189.00) | 151.4 | 04 | Cancel | |
| 6 | + | (\$4,315,36) | (\$1,741.18) | (52,474,08) | (54,128,60) | (\$3.5 | | | |
| 4 | 5 | (\$4,115,36) | (\$1.751.10) | (\$2,465,14 | (34,442,42) | 152.44 | 3401 \$401,313,18 | | |
| ۴. | | 04315.00 | 181.761.768 | | 0.6448.941 | | | | |
| н, | 7 | (54,719-34) | | | | | 3.948 \$487,782.97 | | |
| 10 | and a strength of | CLYL VO | | -021.000.001 | 10110-0010-010 | 1210.75 | 1. 111 d 180 AV1 A1 | | - 64 |



If you want to make changes to a worksheet, click the Review tab, click Unprotect Sheet (), type the unprotect password and click OK.

You can configure a range to require a password before a user can edit it. Select the range you want to protect, click the Review tab and then click Allow Users to Edit Ranges. Click New to open the New Range dialog box. Type a title for the range, use the Range password box to type a password and then click OK. When Excel prompts you to reenter the password, type the password and then click OK.

Protect a Workbook's Structure and Windows

- Display the workbook you want to protect.
- 2 Click the **Review** tab.

3

Excel displays the Protect Structure and Windows dialog box.

- Click the Windows check box to protect the workbook's windows (changes to).
- Type a password in the Password text box, if required.
 - Click **OK**.

If you specified a password, Excel asks you to confirm it.

If you protected the windows:

- Excel hides the window controls. If the workbook is not maximised, Excel also disables the window borders, which means the window cannot be moved, sized, or closed.
- Excel disables many windowrelated commands on the View tab.
- If you protected the structure, Excel disables most commands on the Sheet Shortcut menu.

| 199 | | Da tarita | - | | One Hele Con | | 2_ | | | |
|-------|-----------------------|------------|-----------|-----------|-------------------------------|------------|--------------------|--------------|-----------------|------------|
| | | Language | Conners 5 | - | Chain 10 Canes S These Sel | | rinted royation | -(| | all Ranges |
| _ | 635 + | | A SUN | (845-005) | | | | | | |
| 1. | A | 5 | C | 0 | E | F. | 0 | н | 1 | 1 |
| 1 | | Jan | Fulk | Mar | Int Quarter | Apr | Mary | .han | Ind Quarter | Jul. |
| | ales | | | | | | | | | |
| 3 04 | Velon I | 23,508 | 23,808 | 34,000 | 30,500 | 25,180 | 25,000 | 25,408 | 75,500 | 26.000 |
| 4 DI | Intelligent II | 28,750 | 27,800 | 29,500 | 86,050 | 35,080 | 30,500 | 30,000 | 91.500 | 31.00 |
| 5.00 | Veloa III | 24,408 | 24,808 | 25,350 | 75,650 | 26,680 | 27,000 | 26,258 | 80,350 | 27,80 |
| П | LES TOTAL | 76,850 | 74,800 | 38,350 | 238,280 | 82,780 | 81.655 | 21.10.0 | 101 010 | 84 800 |
| - | Apenana | | | | | | Protect Str | ucture end i | Windows Windows | ~ |
| 8 0 | ont of Goads | 6,132 | 5,884 | 6.308 | 38,416 | 100 | Puleding | Read for | | 10 |
| 9 Ad | dwatiling | 4,600 | 4.200 | 5.200 | 38.000 | 4 | Rang | | | 10 |
| 10 84 | imi | 2,180 | 3.508 | 3.308 | 5 | 180 | W tabel | | | 10 |
| 11 54 | epilee | 1,500 | 1.200 | 1,400 | | 1,300 | | | | 10 |
| 12 54 | alation | 16,000 | 96,808 | 36,500 | 49,500 | 15,580 | (searord | | | 3 |
| 13 54 | Mpping | \$4,250 | \$5,750 | 54,500 | 42,500 | 15,080 | | | | |
| | UNITARY AND IN COLUMN | 500 | 808 | 600 | 1,308 | 160 | | 0 | K Cana | - I |
| 5 82 | APENSES TOTAL | 44.882 | 45,854 | 45,600 | 155,596 | 47,086 | | - | | 7 |
| 16 64 | RDSS PROFIT | 31,768 | 30,866 | 32,150 | \$4,884 | 35,634 | 35,450 | 34,428 | 105.512 | 25,710 |
| | H Bulget / ha | unations . | Pajatiana | / 2009-20 | D FYM / Bab | rates 2141 | | | 5 | |

| Anne Page Toyot Formation Page Stands Thrane Page Stands Thrane Page Stands Thrane Page Stands Thrane Page Stands Thrane | SI E I | | Detter al Vindood - | A |
|--|------------------------------|---------------|-------------------------------------|---------|
| A D A D A S C D | Side to season (ED trace too | Nonzor | Dartan Imponal Ini Vimponal II I | |
| A B C D 1 Jan Felh Marc 2 Bales 2 States 2 3 Bindon II 22,500 27,800 25,000 25,155 5 Behalon III 24,600 25,355 25,556 25,355 | E 1 | | | |
| 1 Ian Pelk Mar 2 Salve 3 Bisles 3 Bisles 4 Bisles 5 Bisles 1 | E I | | | |
| 2 32/65 3 56/elon 1 21,500 23,000 24,00 4 56/elon II 28,750 27,800 29,30 5 56/elon III 24,400 24,000 25,35 | Int Quarter Av | | H I | 1 |
| 3 Birkelow I 23,500 23,600 34,000 4 Dirkelow II 28,750 27,800 29,300 5 Dirkelow III 24,400 34,000 25,35 | | er Mary J | Jun 2nd Quarter | lut. |
| 4 Division II 28,750 27,800 29,50 5 Division III 24,400 24,800 25,35 | | | | |
| 5 Bivision III 24,400 24,800 25,35 | 0 30,500 25,5 | 180 25,000 25 | 5,400 75,500 | 26.000 |
| | | | 0.000 91.500 | 31,000 |
| A SALES TOTAL 79,400 24,800 28,75 | 0 75,650 36/ | 80 27,000 28 | 6,758 80,358 | 100 |
| C BREED LIGHTER LIGHTER LIGHTER LIGHTER | 0 238,280 82,1 | 700 82,500 82 | 3,318 347,850 | B |
| 8 Cost of Goads 12 Decer C 14 6.300 | | | 1572 15.768 | 6,730 |
| 9 Advertising 5.20 | | | 15,750 | 5.500 |
| 30 Rent Mone to Case | | | 6,800 | 2.100 |
| 11 Supplies (p) per late 10 1.40 | | | 1.400 3.990 | 1,300 |
| 12 Selecters De Postari Short. 00 36.50 | | | 3,808 \$6,808 | \$7,000 |
| 15 Shipping partners 50 \$4.50 | | | 4,750 44,250 | 55.808 |
| 18 BRIBRIER 3 800 | 1,300 54 | | 650 1,800 | 650 |
| 15 EXPENSES TO: 34 46.60 | | | 7.722 141.858 | 48,279 |
| 16 GROSS PROFI | 0 \$4,884 35,0 | i34 35,450 34 | 4.428 105.512 | 25,730 |
| 17 prind dt theefs | | | | |
| A M. Budget / Naurytana / Papadiana / 2000 Asets (20) | 2010 First Extended | | | |

SHARE A WORKBOOK WITH OTHER USERS

You can allow multiple users to modify a workbook simultaneously by sharing the workbook. Once you have shared a workbook, other users can open the workbook via a network connection and edit the file at the same time.

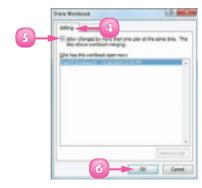
When you share a workbook, Excel automatically begins tracking the changes made to the file. For more information on this feature, see "Track Workbook Changes" later in this chapter. This task assumes you have saved the workbook in a folder that other people can access over the network.

- Display the workbook you want to share.
- Click the **Review** tab.
- Click Share Workbook (I).

| 10 | 日間大臣の | * | | Trustey - Marsel | | | | b | 0 8 2 | 1 |
|------|---------|------------------------|---------------------|--|-------------------|-----------------|------------------|-----------------|------------------|----|
| | | Died Popular | and Permitted E | tala Racan | - 2 | | | | 0-0 | ł |
| 1 ev | 12 | Lander Lander | | Constitute Constant Colore Al Constant Description | | A Dest | 3 | Cat Ru | | |
| | 82.9 | - (° | 6 Northwind Trail | lers wat Pepper Sauc | * | | | | | |
| | A | | | d. | D | 6 | 1 | 0 | 14 | |
| 1 | Product | Pro | duct Name | Product G | de Qty-Du Held | Qry Du. Hand | QNy Available | QII On Order | Bearder Level | |
| 2 | 1.76 | stheind fraders d | (hai) | PW#10-L | 2 | i 25 | 0 | 40 | 1.0 | i) |
| 3 | 2.76 | ethoded Tradem S | y up | INVETCO-8 | | 5 50 | 50 | 58 | - 25 | 4 |
| 4 | 4.79 | ethoded Traders C | Calum Beakarring | NW700-4 | | 6 Ó | d | - 48 | 10 | 4 |
| 5 | 5.76 | rehunded Traders C | Silve Gil | WIT0-5 | | p 38 | 35 | | 11 | ł |
| 8 | 6.76 | rehaded Traders 8 | leysenherry Spread | INVITUR-8 | | 0 0 | 0 | 10 | 25 | ł |
| 3 | | ethnind Tradets D | | WWT01%-7 | | 0 0 | | | 10 | |
| 8. | | rethuning Traders C | | 199175-8 | | 0 0 | 0 | | 11 | |
| 81 | 34 194 | withward Taradens V | Ashuts | INVITORN-54 | | 0 40 | 40 | | 11 | ł |
| 70 | | stheind fraders P | | NWTCPV-17 | | 0 0 | 0 | -4 | 11 | ł |
| 11 | 29.76 | rehund Traders C | hecelara Bisouits N | Ax INVITEGAT-2 | 2 | 0 0 | 0 | 28 | 1 | ŝ |
| 12 | 30 19 | retrained Traders II | Aermaladie - | NUTP-6 | | 6 Ó | à | - 48 | 11 | 1 |
| П | | rehunded Traders S | | INVESTIGATION OF | 5 | p 9 | | | | |
| 14 | 34 % | retructed Traders 8 | lear | NWT5.54 | 2 | 1 23 | 0 | | 15 | |
| 死 | 40 1% | ethnind Tradets C | trab lifest | IVWTCH-40 | | 0 0 | 9 | 129 | | |
| 杨 | 41.1% | orthoulind Tarabarts C | San Chruder | HW1750-41 | | 0 0 | 0 | | 15 | ł |
| | | 10 m | | | 0.4 | | | | | ł. |
| Aca | e 121 | | | | | | 1 1 12 MIN | | 0 0 | ð. |

The Share Workbook dialog box appears.

- Click the Editing tab.
- Click the Allow changes by more than one user at the same time check box (changes to).

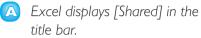


Click **OK**.

Excel tells you that it will now save the workbook.

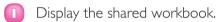
Click OK.

Excel saves the workbook and activates sharing.



You and users on your network can now edit the workbook at the same time

See Users with the Workbook Open



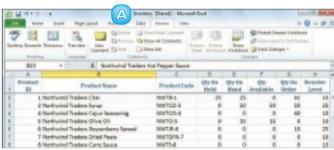
- Click the **Review** tab.
- Click 🛄.

The Share Workbook dialog box appears.

Click the **Editing** tab. 4

> The Who has this workbook open now list displays the users who are currently editing the file.





invest Lot



te actor will now save the workbook, do you want to continue?

OX Canet

TRACK WORKBOOK CHANGES

If you want other people to make changes to a workbook, you can keep track of those changes so you can either accept or reject them (see "Accept or Reject Workbook Changes"). Excel's Track Changes feature enables you to do this.

When you turn on Track Changes, Excel monitors the activity of each reviewer and stores that reviewer's cell edits, row and column additions and deletions, range moves, worksheet insertions, and worksheet renames. When you open the workbook later on, you see all of these changes onscreen, along with the name of each person who made the change.

- Display the workbook you want to track.
 - 2 Click the **Review** tab.
 - Click **Track Changes** (**)**.
 - Click Highlight Changes.

| 5 | Parties Inset P | Comm | Ballent . | Deta (| Al Comment | | en Verstenne 🥔 | Test Changes | Let Larges |
|---|---|-----------------------|--|-------------------|---------------------|------------------------------|--|------------------------------|------------------------------|
| | 88 × (* | 5. | | | | | 1 | Apret Ros | Changes R |
| | A. | 8 | ¢ | 0 | - 6 | F F | 0 | н | |
| | Maximum Hav | Ho Overtime | Overtime rfy Wage Pay Bate Pay Rate | \$10.50 1.5 | | | Q | 2 | |
| Γ | | Work Start Time | Lunch Start Time | Lanch End Time | Work End Time | Total Hours Worked | Non- Weekend, Non-Holiday Nours | Overtime Hours | Holiday |
| | Data | | | _ | | | 0.00 | | 8.00 |
| | Date Monday Sep 6, 2010 | | | | | 8:00 | 0:00 | 0.08 | - NOR |
| | Monday Sep 6, 2010 Twesday Sep 7, 2010 | | | | _ | 0.00 | 0.00 | 0.00 | 8:00 |
| | Monday Sep 6, 3838 | | | | _ | | | | |
| - | Monday Sep 6, 2010 Twesday Sep 7, 2010 | | | | _ | 0.00 | 0.00 | 0.00 | 8:00 |
| | Monday Sep 6, 2010 Tuesday Sep 7, 2010 Nedhesday Sep 8, 2010 | | | | | 0.00 8.00 | 0.00 | 0.00 | 8-00 8:00 |
| E | Monday Sep 6, 2020 Tuesday Sep 7, 2020 Nedraeday Sep 8, 2020 Thursday Sep 9, 2020 | | | | | 8:00 8:00 8:00 | 080 080 080 | 0.00 | 8:00 8:00 8:00 |
| | Monday Sep 6, 2020 Tuesday Sep 7, 2020 Nedraeday Sep 8, 2020 Thursday Sep 9, 2020 Friday Sep 20, 2020 | | | | | 8:00 8:00 8:00 8:00 | 0.80 0.80 0.80 0.80 | 0.08 0.08 0.08 0.08 | 8:00 8:00 8:00 8:00 |

The Highlight Changes dialog box appears.

- Click the Track changes while editing check box (changes to).
 - Leave the When check box activated () and leave All selected in the list.
 - Click the Who check box, the Who I and then click Everyone but Me to show every user's changes but your own.
 - Click the **Where** check box, click inside the **Where** range box, and then select a range to track changes only in that range.
 - Leave the Highlight changes on screen check box activated (I) to view the workbook changes.
- 6 Click OK.

Excel tells you it will now save the workbook.

7 Click **OK**.

Excel activates the Track Changes feature.

E Excel shares the workbook and indicates this by displaying [Shared] beside the workbook name.

Note: See "Share a Workbook with Other Users" to learn more about workbook sharing.

| 2 | Highlight Changes 17 (5 ed. dwapes while edong. The elec shares in | (Appendix |
|---|---|----------------------|
| | | * * * |
| | Microsoft Load | rou-ment to contract |



ACCEPT OR REJECT WORKBOOK CHANGES

After you turn on Excel's Track Changes features (see "Track Workbook Changes"), you can accept or reject the changes that other users make to the workbook.

Track Changes enables you to see exactly which parts of the workbook others have changed and who made each of those changes. Track Changes also enables you to accept those changes that you think are useful or accurate and reject those changes that are not needed or that are incorrect.

- Display the workbook you are tracking.
- Click the **Review** tab.
- Click **Track Changes** (**)**.
- Click Accept/Reject Changes.

| Fore that is | toriaina | Formula: | | Nation Comm | - 2 | | (Drover | -th 😡 e |
|--|-----------|--------------|------------|-------------|--------------|-------------|----------|---------------|
| the second second | b | | - Gineri | A Commen | | 0 | (Dates) | Control India |
| g Rearch Theorem Trans | Committee | the fighters | [] they | - | Pubell Lines | 3 |) Dank (| Stanges - |
| Posting Lange | 100 | | Colomatela | | | | | Name Onang |
| 80 × (* | 5. | | | | | (4)- | A. 400 | utiligent (N |
| A | 8 | c | 0 | 6 | F | | н | |
| | | | _ | | | ~ | | |
| | | | Vysa Harpe | e | | | | |
| Maximum Hav | | | | | | | 0 | |
| | | orly Wage | | | | 1.201 | 1 | |
| | | Pay Bate | | | | 1 al | | |
| | 1401103 | Pay Rate | φ | | | N/ | - N | |
| | _ | - | - | | - | Not- | _ | |
| | Werk | Lunch | | Work | Tetal | Washand. | | |
| | Start | Start | Lunch | End | HOUTE | Non-Holiday | Outline | Holiday |
| Data | Time | Time | End Time | Time | Worked | Haurs | Haurs | Heurs |
| Monday Sep 6, 3838 | | | | | 6.00 | 0:00 | 0.08 | 8.00 |
| Tuesday Sep 7, 2010 | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| Wednesday Sep 8, 3838 | | | | - | 6:00 | 0:00 | 0:00 | 8:00 |
| Thursday Sep 9, 2010 | | | | | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | 8.00 | 0.80 | 0.08 | 0.00 |
| Friday Sep 10, 2010 | | | | | 0.00 | 0.00 | 9.00 | 000 |
| | | | | | 8.00 | 0.80 | 0.08 | 8.00 |
| Friday Sep 50, 3818 | | | | | | | | |
| Friday Sep 10, 2010 Mondes Sep 13, 2010 | | _ | _ | _ | E.F. | | | |

If your workbook has unsaved changes, Excel tells you it will now save the workbook.



3) Click **OK**.

Unless you know that other people still require access to the workbook, you should turn off the tracking feature when your review is complete. To do this, click the Review tab, click is and then click Highlight Changes to open the Highlight Changes dialog box. Click the Track changes while editing check box (in changes to in) and then click OK. The Select Changes to Accept or Reject dialog box appears.

- ▲ Leave the **When** check box activated (☑) and "Not yet reviewed" selected in the list.
- B If you only want to review changes made by a particular user, click the **Who** check box, the **Who ⊡**, and then the user's name.
- Click **OK**.

The Accept or Reject Changes dialog box appears.

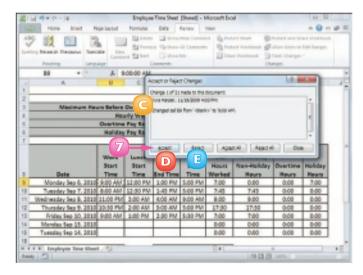
- Excel displays the details of the current change.
- 7 Click an action for the change:
 - Click Accept to leave the change in the workbook.
 - E Click **Reject** to remove the change from the workbook.

Excel displays the next change.

8 Repeat Step 7 to review each of the changes.

Note: You can also click **Accept All** or **Reject All** to accept or reject all changes at once.

| \$ | red Charg | es to Accept or Reject | 0.00 |
|-----|-------------|------------------------|------|
| | hid: change | | |
| | (Cathop) | Nati yet-monened | - |
| R | Date: | Dentre | |
| U | Diver | | 1 |
| - 1 | | | - |
| | | | Lane |



If another user makes changes that affects cells that you change, when you save the workbook, Excel displays the Resolve Conflicts dialog box, which shows your change and the other user's change. If your change is the correct one, click Accept Mine; otherwise, click Accept Other. If there are multiple conflicts, you can save time by clicking either Accept All Mine or Accept All Others.

MAKE A WORKBOOK COMPATIBLE WITH EARLIER VERSIONS OF EXCEL

You can save an Excel workbook in a format that makes it compatible with earlier versions of Excel. This enables you to share your workbook with other Excel users who do not have the most recent version of the program. Versions of Excel prior to Excel 2007 cannot read documents in the standard format used by Excel 2007 and Excel 2010.

21 14 17

10.0

See As

Core Core

Case of Case

- Open the workbook you want to make compatible.
 - Click **File**.
 - Click Save As.



PartialK

Permissions

mation about Company ...

and Dessarantici Company Meeting due

Page Level

sting - Marmatilla

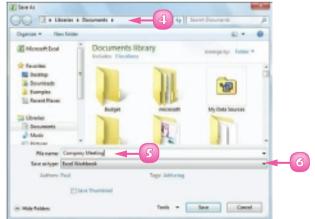
DES FROM VIN

0.000

- -

The Save As dialog box appears.

- Select the folder in which to store the new workbook.
- Click in the File name text box and type the name that you want to use for the new workbook.
- 🗿 Click the Save as type 🗔.



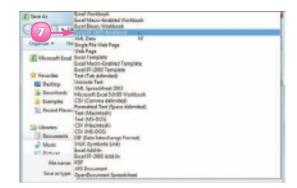
Click the Excel 97-2003

Click Save.

Workbook file format.

Excel saves the file using the Excel

97-2003 Workbook format.



Z Saw As G B a Librarian a Dan -Organize + New Sulder 41 . 2 Monart Loal **Documents library** America by: Felder the American E beinp a Downloads -J. Examples Sil Record Place Adv. Closed a Subjection 😂 Ubwie C Deeum A Music OT HISTORY Nanama Save so type: Excel \$7.3000 Monitored Authors Faul Tage Add along Elleve Thursdaul Save Canod · Mile Robbert

8

The same file format is used by Excel 2010 and Excel 2007. If you work with people who use only these Excel versions, then you should stick with the default file format – which is called Excel Workbook – because it offers many benefits in terms of Excel features.



On Windows, the Excel 97-2003 Workbook file format is compatible with Excel 97, Excel 2000, Excel XP and Excel 2003. On Mac OS, the Excel 97-2003 Workbook file format is compatible with Excel 98, Excel 2001 and Office 2004.

COLLABORATE ON A WORKBOOK ONLINE

If you have a Windows Live account, you can use the SkyDrive online storage feature to store an Excel workbook in an online folder and then allow other users to collaborate on that workbook using the Excel Web App.

For another person to collaborate with you on your online workbook, that person must have a Windows Live ID. If the person does not have a Windows Live ID, he or she can go to https://signup.live.com/ to register for a free account from Microsoft.

Save a Workbook to Your Windows Live SkyDrive

- Sign in to your Windows Live account.
- 2 Open the workbook you want to share.
- Click the File tab.
- Click Save & Send.
- Click Save to Web.
- 6 Click the Web folder you want to use.
- 7 Click Save As.
- 8 Click **Save**.





Allow Another User Access to Your Windows Live SkyDrive

 Log on to your Windows Live account.

Click SkyDrive.

Your Windows Live SkyDrive appears.

- Click the folder that contains the workbooks you want to share.
- 4 Click More.
- Click Edit permissions.

The folder's Edit Permissions page appears.

- Type the Windows Live e-mail address of the person you want to collaborate with.
- 7 Press Tab.
 - Windows Live adds the person to the list.
- Click I here and then click Can add, edit details, and delete files.
- Olick Save.

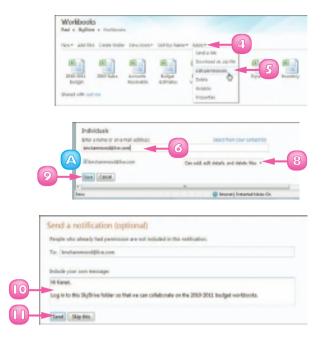
Windows Live prompts you to send a notification for the folder.

0

Type a message to the user.

Click Send.

Windows Live sends an e-mail message to the user. The user can click the link in that message, log on to Windows Live and edit a workbook in the shared folder.



 \checkmark

When you open a workbook using the Excel Web App, examine the lower right corner of the Excel screen. If you see I person editing, it means you are the only user who is working on the file. However, if you see 2 people editing, then it means another person is collaborating on the workbook with you.

INDEX

Symbols

+ (addition operator), 98, 99 , (comma) in number formatting, 81 as thousands separator, 27 / (division operator), 99 = (equals sign), 4, 98, 99, 100 ^ (exponentiation operator), 99 > (greater than operator), 99 $\geq =$ (greater than or equal to operator), 99 < (less than operator), 99 <= (less than or equal to operator), 99 * (multiplication operator), 98, 99 <> not equal to operator, 99 () (parentheses), in operator precedence, 99 % (percentage operator), 99 £ (pound sign), 27 ' (quotation mark, single), 113 - (subtraction operator), 99

A

adding background colour to cell or range, 78-79 to chart element, 178-179 border to range, 94–95 cell to worksheet, 46-47 chart to worksheet, 5, 168-169 column to worksheet, 44-45 command to Ribbon, 12–13 comment to cell, 188–189 data to cells, 4, 24-27 Excel command to Quick Access Toolbar, 10–11 Excel command to Ribbon, 12–13 Excel program icon to Windows taskbar, 7 formula to cell, 4, 100-101 function to formula, 4, 104–105 graphic effect to chart element, 182-183 label to chart, 171

new, blank worksheet to Excel workbook, ||8-||9 new tab to Ribbon, 12 Quick Access Toolbar button directly from Ribbon, II **Ouick Access Toolbar button using Excel** Options dialog box, 10–11 range name to formula, 110-111 range to worksheet, 46-47 record to table. | 59 row to worksheet, 44-45 style to chart element, 184-185 title to chart, 170 worksheet to workbook from template, 119 addition operator (+), 98, 99 address, cell. See also range name adjusting when copying formula, 114, 115 when moving formula, 114 converting to range name, []] defined, 22 as operand in formula, 98 typing directly into formula, 113 aligning text and numbers in cell by applying AutoFormat, 82–83 centring across multiple columns, 74-75 horizontally, 72 vertically, 73 Apply Names dialog box, 111 area chart. 167 arithmetic formula, 99 arithmetic operator, 99 Arrange Windows dialog box, 138–139 asterisk (*), 98, 99 AutoComplete feature, 25 AutoFill feature, 40, 41 AutoFilter feature, 154–155 AutoFit feature, 89, 91 AutoFormat feature, 82-83

automatic subtotal, 162–163 AutoSum feature, 108–109 AVERAGE function, 4, 102, 103, 108, 109 axis, chart, 166

B

background adding colour to range, 78-79 gradient effect to range, 79 customising for chart element, 178–179 bar chart. 167 bevel effect, adding to chart element, 183 bold (font effect), 68, 69 border adding to range, 94-95 applying AutoFormat, 83 compared with gridline, 95 customising for chart element, 180-181 drawing by hand, 95 removing from chart element, 185 styling, 95 bubble chart, 167

С

caret sign (^), 99 Cascade window view mode, 139 category axis, 166 cell address. See also range name adjusting when copying formula, 114, 115 when moving formula, 114 converting to range name, 111 defined. 22 as operand in formula, 98 typing directly into formula, 113 cells adding background colour, 78–79 comment to, 188–189 data to, 4, 24-27 to worksheet, 46-47 address, 22, 98, 111, 113, 114, 115

aligning text and numbers in, 72–75 AutoComplete feature, 25 centring text across. 74-75 text within. 72 clearing formatting, 33 closing after entering data, 25 copying range, 42-43 creating formula in, 100–101 defined. 22 deleting data from, 32-33 from range, 49 editing data in, 4, 30-31 entering numbers into, 26-27 text into, 24-25 filling with same data, 38-39 with series of values, 5, 40-41 indenting text in, 73 inserting special symbol in, 28-29 in worksheet, 46–47 justifying text in, 73 merging, 54-55 moving range, 42-43 repeating numbers, 27 restricting data entry, 156–157 rotating text within, 76–77 selecting all. 37 range, 36-37 undoing edit, 31, 33 ways to accommodate text in, 92-93 ways to adjust text size, 93 wrapping text within, 90, 92-93 centring text across columns, 55, 74-75 within cells, 72 changing. See also Track Changes feature chart layout, 175 chart style, 175

changing (continued) default font. 67 Excel window view, 16–17 font. 66-67 font colour. 70–71 font size, 66–67 gridline colour, 126–127 range name, 59 user name, 189 chart adding data label, 171 special effect to element, 182-183 style to element, 184-185 title, 170 to worksheet, 5, 168-169 area type, 167 bar type, 167 bubble type, 167 changing layout, 175 style, 175 column type, 167 creating, 168-169 customising element background, 178–179 defined, 166 displaying data table, 174 doughnut type, 167 formatting specific elements, 176-185 line type, 167 list of elements. 166 of types, 167 pie type, 167 positioning legend, 172–173 radar type, 167 stock type, 167 surface type, 167 XY type, 167 chart legend, 166, 172 chart sheet. 169 chart title, 166, 170-171 clearing formatting, 33

closing current workbook, 8 Excel program, 7, 8 colour adding background to chart element, 178–179 background to range, 78–79 gradient effect to range, 79 creating scheme, 143 customising chart element border, 180–181 in effect scheme, 147 font, changing, 70–71 gridlines, changing, 126–127 switching schemes, 142–143 column chart, 167 columns adding to worksheet, 45 adding up numbers using SUM function, 106–107 adjusting width, 88-89 AutoFit feature, 89 defined, 22 deleting, 49 freezing, 52-53 hiding, 50–51 inserting in worksheet, 45 multiple, centring text across, 74-75 selecting, 37 sorting, 153 as table field, 5 transposing with rows, 56–57 unfreezing, 53 unhiding, 51 comma (,) in number formatting, 81 as thousands separator, 27 command, Excel adding to Quick Access Toolbar, 10–11 adding to Ribbon, 12–13 comment adding to cell, 188-189 editing, 189 removing from cell, 188 viewing on worksheet, 189

comparison formula, 99 comparison operator, 99 conditional formatting, 84-85 controls, in Ribbon tabs configuring in Excel Options dialog box, 19 defined. 9 converting cell address to range name, 111 copying formula, 114, 115 range, 42, 43 worksheet, |20-|2| COUNT function, 103, 108, 109 Create Names from Selection dialog box, 61 currency value entering, 27 formatting, 80 customising. See also Excel Options dialog box Ouick Access Toolbar, 10–11 Ribbon, 12–13

D

data analysis defined. 151 filtering range, 154–155 sorting range, 152–153 summarising, 162–163 validation rule, 156–157 data label. 171 data marker, 166 data point, defined, 166 data series. 166. 172 data table creating, 160–161 defined. 174 displaying with chart, 174 data type. See date; numbers; text; time data validation rule, 156–157 data value, defined, 166 date as data type, 23 filling series, 41 formatting, 80 inserting into cell, 27

decimal point (.), 27 deleting cell or range, 49 data in cell, 32–33 row or column, 49 worksheet, 124–125 displaying hidden row or column, 51 division operator (/), 99 dollar sign (\$), 27 doughnut chart, 167

E

editing cell data, 4, 30-31 effect, graphic adding to chart element, 182-183 predefined scheme applying style to chart element, 184–185 applying to workbook, 146–147 removing from chart element, 185 entering number into cell, 26-27 text into cell. 24-25 equals sign (=), 4, 98, 99, 100 Excel closing, 7 file format versions, 198–199 online workbook collaboration, 200-201 starting, 6–7 Excel Options dialog box changing default font and font size, 67 display of formula compared with calculated result, 101 gridline colour, 127 user name, 189 customising Quick Access Toolbar, 10–11 Ribbon, 12–13 displaying, 18 how to use, 19 ways to open, 19 Excel Web App, 201

Excel window arranging multiple open workbooks in, 138–139 changing view, 16–17 closing, 8 elements, 8 Full Screen view, 17 illustrated, 7, 8 maximising, 8 Mormal view, 17 Page Break Preview, 16–17 Page Layout view, 16 restoring, 8 exiting Excel, 7 exponentiation operator (^), 99

F

field, column as, 5 file format, 198–199 File tab. 8 fill. colour for chart element, 178–179 gradient-type, 179 picture-type, 179 for range background, 78–79 removing from chart element, 185 texture-type, 179 Fill Effects dialog box, 79 filling range with data, 5, 38-41 filtering range, 154-155 financial function, 103 Find and Replace dialog box, 140–141 finding workbook text, 140–141 font applying AutoFormat, 83 effect. 68-69 scheme to workbook, 67, 70, 144-145 changing colour, 70-71 default, 67 size, 66-67 creating new scheme, 145

Format Cells dialog box Alignment tab, 73, 75, 76, 93 Font tab. 69 Number tab. 81 Format dialog box, 176, 177 Format tab, Ribbon, 176, 177, 185 formatting chart element, 176-185 clearing, 33 conditional, 84-85 filling range without, 39 numbers, 80-81 by using AutoFormat feature, 82-83 worksheet range, 65–95 formula adding to cell. 4. 100-101 function to, 104-105 range name to, 110-111 arithmetic. 99 building, 100-101 comparison, 99 copying, 114, 115 creating data table for, 160–161 defined, 4, 98 displaying calculated result, 101 original, 101 function as, 4 moving, 114 operator precedence in, 99 referencing range in another workbook, 113 in another worksheet. ||2-||3 structure, 98 Formula bar creating formula in, 100, 101 defined. 4 editing cell data, 30–31 numbers in, 26 text in. 24 forward slash (/), 99 freezing row or column, 52-53

Full Screen view, Excel window, 17 function adding to formula, 4, 104–105 advantages of using, 102 defined, 4, 102 financial, 103 role in formula, 4, 98, 102–103 statistical, 103 structure, 102 viewing result in status bar, 109 Function Arguments dialog box, 105 FV function, 103

G

glow effect, adding to chart element, 182 Go To dialog box, 63 gradient effect applying to chart element, 179 applying to range background, 79 greater than operator (>), 99 greater than or equal to operator (>=), 99 gridline on chart defined, 166 toggling on and off, 173 on worksheet changing colour, 126–127 toggling on and off, 95, 128 group, Ribbon, 12, 13

Η

headings, worksheet, toggling on and off, 129 height, row, adjusting, 90–91 hidden row or column, displaying, 51 hiding row or column, 50–51 Horizontal window view mode, 139

indenting cell text, 73 Insert dialog box, 47 Insert Function dialog box, 4, 104 inserting cell or range into worksheet, 46–47 chart sheet into workbook, 169 row or column into worksheet, 44–45 special symbol into cell, 28–29 IPMT function, 103 italic (font effect), 68, 69

J

justifying cell text, 73

K

keyboard shortcut for applying font effect, 69 for moving among worksheets in workbook, 119 for opening dialog box Create Names from Selection dialog box, 61 Format dialog box, 177 Name Manager dialog box, 59 for selecting range, 36–37

L

label. **See also** headings, worksheet, toggling on and off adding to chart, 171 basing range name on, 60–61 creating by merging cells, 54–55 freezing and unfreezing, 52–53 legend, chart, 166, 172 less than operator (<), 99 less than or equal to operator (<=), 99 line chart, 167 logical value, 99

Μ

MAX function, 103, 108, 109 maximising Excel window, 8 Maximize button, 139 MEDIAN function, 103 menu bar, 9 merging cells, 54–55 Microsoft Excel closing, 7 file format versions, 198–199 online workbook collaboration, 200–201 starting, 6–7 MIN function, 103, 108, 109 minimising Excel window, 8 minus sign (–), 99 MODE function, 103 mouse pointer, defined, 22 moving formula, 114 range, 42, 43 worksheet, 120–121 multiplication operator (*), 98, 99

Ν

208

Name Manager dialog box, 59 naming range, 58–59 worksheet, 123 navigating among worksheets in workbook, 119 worksheet by using range name, 62-63 negation operator (-), 99 negative number, 27, 105 Normal view, Excel window, 17 not equal to operator (<>), 99 NPER function, 103 numbers adding up row or column, 106–107 applying AutoFormat, 83 as data type, 23 decimal point in, 27 entering into cell. 26-27 currency value, 27 percentage value, 27, 81 filling series, 5, 40-41 formatting in cell, 80–81 negative, 27 repeating, 27 thousands separator in, 27

0

online collaboration, 200–201 opening workbook, 137 operand in Excel formula, 98 range name as, 110–111 operator addition (+), 98, 99 arithmetic, 99 comparison, 99 defined. 98 division (/), 99 in Excel formula, 98 exponentiation (^), 99 greater than (>), 99 greater than or equal to $(\geq =)$, 99 less than (<), 99 less than or equal to $(\leq =)$, 99 multiplication (*), 98, 99 negation (-), 99 not equal to (<>), 99 percentage (%), 99 precedence, 99 subtraction (-), 99 orientation, text, 76–77 outline. See also border customising for chart element, 180–181 removing from chart element, 185

P

page break, 16–17 Page Break Preview, Excel window, 16–17 Page Layout view, Excel window, 16 parentheses, in operator precedence, 99 password, for protecting worksheet, 190–191 pattern applying AutoFormat, 83 for chart element, 166 percentage, formatting, 27, 81 percentage operator (%), 99 picture fill, applying to chart element, 179 pie chart, 167 plot area, 166 plus sign (+), 98, 99 PMT function, 4, 102, 103, 105 point (font size), 66

pointer, mouse, 22 pound sign (£), 27 PPMT function, 103 precedence, operator, 99 protecting workbook, 190–191 PV function, 103

Q

Quick Access Toolbar adding button directly from Ribbon, 11 using Excel Options dialog box, 10–11 customising, 10–11 defined, 8 moving below Ribbon in Excel window, 10, 11 removing button, 11 Undo button, 31, 33 QuickFormat button, 82 quitting Excel, 7 quotation mark, single ('), 113

R

radar chart. 167 range adding background colour, 78–79 border to, 94–95 range name to formula, 110–111 to worksheet, 46-47 in another workbook, referencing, 113 in another worksheet, referencing, 112-113 applying AutoFormat feature, 82-83 conditional format, 84-85 predefined style to, 86-87 changing font or font size, 66-67 converting address to range name, 111 to table, 158-159 table to, 159 copying, 42, 43 defined, 22, 35

deleting cell from, 49 data from, 48-49 filling with same data, 38-39 with series of values, 5, 40-41 without copying formatting, 39 filtering, 154–155 formatting, 65-95 inserting in worksheet, 46–47 moving, 42, 43 naming, 58-59 renaming, 59 selecting, 36-37 sorting, 152–153 using SUM function to add up numbers, 107 range address converting to range name, 111 as operand in formula, 98 typing directly into formula, 113 range name adding to formula, 110–111 basing on text label, 60-61 changing, 59 converting range address to, 111 defining, 58-59 in formula, 98 navigating worksheet using, 62-63 RATE function, 103 record, row as, 5 reference, cell. See also range name adjusting when copying formula, 114, 115 when moving formula, 114 converting to range name, ||| defined, 22 as operand in formula, 98 typing directly into formula, 113 renaming range, 59 worksheet, 123 repeating number, 27

replacing workbook text, 141 restoring Excel window, 8 Ribbon adding command to, 12–13 new tab to, 12 customising, 12–13 defined, 8, 9 illustrated, 8, 9 removing command, 13 customisation, 13 restoring tab, 13 rotating text within cell, 76-77 rounded corners, on chart border, 181 rows adding to worksheet, 44 adding up numbers using SUM function, 106–107 adjusting height, 90–91 AutoFit feature, 91 defined, 22 deleting, 49 freezing, 52-53 hiding, 50–51 inserting in worksheet, 44 merging cells in, 54-55 selecting, 37 as table records, 5 transposing with columns, 56–57 unfreezing, 53 unhiding, 51

S

saving workbook in current Excel format, 136 in earlier Excel format, 198–199 as template, 135 scheme, colour, 142–143 screen. **See** Excel window selecting range, 36–37 row or column, 37 series, filling cells, 5, 40-41 shadow, adding effect to chart element, 182, 183 showing hidden row or column, 51 single quotation marks ('), 113 SkyDrive feature, 200-201 slash (/), 99 smart tags, 14–15 soft edge, adding effect to chart element, 183 sorting range, 152–153 special effect adding to chart element, 182-183 predefined scheme applying style to chart element, 184-185 applying to workbook, 146-147 removing from chart element, 185 special symbol, inserting in cell, 28-29 spreadsheet, 3, 4, 22. See also workbooks, Excel Spreadsheet Solutions, 119. See also template Start menu, 6, 7 starting Excel, 6–7 statistical function, 103 status bar, 8, 30, 109 STDEV function, 103 STDEVP function, 103 stock chart. 167 strikethrough (font effect), 68, 69 style creating, 87 predefined, applying to chart element, 184-185 to worksheet range, 86–87 removing from chart element, 185 saving, 87 for table, 87 subscript (font effect), 68, 69 subtotaling data, 162–163 subtraction operator (-), 99 Sum button, 5, 108-109 SUM function, 102, 106–107 superscript (font effect), 68, 69 surface chart, 167 switching between workbooks, 113

symbols + (addition operator), 98, 99 , (comma) in number formatting, 81 as thousands separator, 27 / (division operator), 99 = (equals sign), 4, 98, 99, 100 ^ (exponentiation operator), 99 > (greater than operator), 99 >= (greater than or equal to operator), 99 < (less than operator), 99 <= (less than or equal to operator), 99 * (multiplication operator), 98, 99 <> not equal to operator, 99 () (parentheses), in operator precedence, 99 % (percentage operator), 98, 99 £ (pound sign), 27 ' (quotation mark, single), 113 - (subtraction operator), 99 inserting in cell, 28-29

T

tab. Ribbon, 9, 12, See also tool tab tab. worksheet defined. 22 renaming worksheet, 123 using to move worksheet within workbook, 121 table. See also data table adding record to, 159 applying predefined style to, 86-87 converting to range, 159 range to, 158–159 spreadsheet as, 5, 158 taskbar, Windows, adding Excel icon to, 7 template adding worksheet to workbook from, 119 creating new workbook from, 134–135 saving existing workbook structure as, 135 text. See also font adjusting size within cell, 93 AutoComplete feature, 25

centring across multiple cells, 74–75 within cell. 72 as data type, 23 entering into cell, 24-25 finding and replacing, 140–141 multiple lines in cell, 90, 92–93 wrapping within cell, 90, 92–93 text label, basing range name on, 60-61 texture fill, applying to chart element, 179 theme, workbook applying colour scheme, 78, 142–143 effect scheme, 146–147 font scheme, 67, 70, 144-145 predefined workbook style, 86-87, 148, 149 creating colour scheme, 143 from current theme, 149 font scheme, 145 thousands separator (,), 27 Tiled window view mode, 139 time as data type, 23 formatting, 80 inserting into cell, 27 title chart, 166, 170-171 worksheet, creating row by merging cells, 55 title bar, 8 tool tab. 13 total, calculating, 5 Track Changes feature accepting or rejecting change, 196–197 resolving change conflict, 197 reviewing change, 196–197 turning on, 194–195 transposing row and column, 56–57 typeface. See font

U

underline (font effect), 68, 69 Undo button, 31, 33 unfreezing row or column, 53 unhiding row or column, 51 user name changing, 189 displaying list of current workbook users, 193

V

value axis, 166 Vertical window view mode, 139

W

Web. See Excel Web App Webdings, 29 what-if analysis, 161 width, column, adjusting, 88-89 window, Excel arranging open workbooks in, 138–139 changing view, 16–17 closing, 8 elements. 8 Full Screen view, 17 illustrated, 7, 8 maximising, 8 minimising, 8 Normal view, 17 Page Break Preview, 16–17 Page Layout view, 16 restoring, 8 Windows Live, 200-201 Wingdings, 29 workbooks, Excel. See also worksheets, Excel adding new, blank worksheet, 118–119 worksheet from template, 119 applying colour scheme, 142–143 effect scheme, 146-147 font scheme, 144–145 arranging windows, 138–139 changing default font and font size, 67 collaborating on, 187-201

copying range between, 43 worksheet between, 122–123 worksheet within, 122–123 creating from existing workbook, 135 new. blank. 132-133 from template, 134–135 defined, 22, 131 displaying current users, 193 find and replace text, 140-141 inserting chart sheet, 169 moving range between, 43 worksheet between, 120–121 worksheet within, 121 online collaboration, 200-201 opening, 137 protecting, 190-191 referencing range between, 113 saving in format compatible with earlier Excel version, 198-199 to preserve changes, 136 as template, 135 sharing, 192-193 switching between, 113 tracking changes, 194–195 viewing multiple sections in different windows, 139 worksheet tab defined. 22 renaming worksheet, 123 using to move worksheet within workbook, 121 worksheets. Excel adding background colour to range, 78–79 border to range, 94–95 cell or range to, 46–47 charts to, 5, 168-169 comment to cell. 188

new, blank, 118–119 row or column to, 44–45 to workbook. 118–119 to workbook from template, 119 changing gridline colour, 126–127 copying range between, 43 sheet between workbooks, 122–123 sheet within same workbook, 122–123 creating title row by merging cells, 54–55 defined. 22 deleting, 124-125 cell or range, 48–49 data, 32–33 editing cell data, 30–31 entering number into cell. 26–27 text into cell. 24-25 freezing row or column, 52–53 hiding row or column, 50–5 l illustrated, 8, 22

inserting date and time into, 27 moving range between, 43 range within, 42 sheet between workbooks, 120–121 sheet within same workbook. [2] navigating using range name, 62-63 password-protecting, 190–191 referencing range between, 112–113 renaming, 123 selecting all cells, 37 toggling gridlines on and off, 128 headings on and off, 129 transposing rows and columns, 56–57 typical layout, 22 wrapping text, 90, 92-93

X

XY chart, 167

SINPLY the easiest way to tackle technology...



Step-by-step introduction to technology



Concise, jargon-free information

Packed with full-colour screenshots



ISBN 978-0-470-71133-0 £10.99



ISBN 978-0-470-71129-3 £10.99

Available from all good bookshops



