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## A BUTTER FAT AND DIVIDEND

## CALCULATOR

FOR

## OPERATORS AND SECRETARIES

OF

## CREAMERIES AND CHEESE FACTORIES



Instructor in Milk Testing, University of Wisconsin, and Secretary of Wisconsin Cheesemakers' Association

MADISON, WIS.


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## By ADOLPH SCHOENMAN

## PREFACE.

Since the invention of the Babcock Test, and the dividing of money according to the test, in butter and cheese factories, Secretaries have found it a great task to thus divide the money in the ordinary way of figuring. And believing that computation tables wherewith the work of calculating the butter fat of milk, and the money value of the same can be easily and quickly accomplished, would be bailed by the rank and file of factory operators and Secretaries of butter and cheese factories, we have for such arranged this Butter Fat and Dividend Calculator, and would kindly request that the instructions for using the various tables be thoroughly studied and well understood before attempting to use the tables. The author's further aim in arranging this little book was, to make it so plain and comprehensive as to be useful as a text-book in the various dairy schools where the Babcock Test system, and the dividing of the money under the system, is taught.

Part I gives instructions for using the various computating tables.
Part II illustrates, by example, how the money may be divided.
Part III is devoted to the various computating tables of the book, by the use of which dividends to factory patrons can be made very quickly and correctly.

THE AUTHOR.

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## TABLE OF CONTENTS.



## INSTRUCTIONS FOR USING CALCULATING TABLE IN DETERMINING AMOUNT OF BUTTER FAT.

1. The calculated fat for $3.6 \%$ milk will be found on page 36 , the page always corresponding to the test $\times 10$.
2. The left side of each page will show the calculated fat for the hundreds and thousands column of your figures, while the right side of the page is used to show the calculated fat for the units and tens column.
3. Suppose you wish to find the calculated fat for 2440 lbs . of milk which tests 3.8 . First, cut off the two right hand figures (40). Then turn to page 38, and on the right half of the page find the number 40 ; to the right of which find 1.5 the calculated butter fat.
4. Next, on the left half of the same page, find the number 24 , to the right of which find 91.2 , the calculated fat, which place above the former amount, 1.5 , and add; making 92.7 lbs . of butter fat.
5. When using this calculator, group your milk which tests alike together, to avoid turning over from one page to the other, unnecessarily. Thus: Suppose patrons A, E and H all test alike, say 3.4. Turn to page 34 and find the calculated butter fat of those three before you turn the leaf, and so on with all the other patrons, testing alike.
6. Many factory operators divide the month into four periods, and average the test by adding the four tests and then dividing by four. Thus-

A tests $3.8+4.0+3.6+3.5=14.9$, and $14.9 \div 4$ $=3.725$, average test. You will notice that the 25 to the right of the 3.7 is not taken in the calculating table of this book, hence I will here insert a rule by which you can quickly calculate any such fractions.
7. By reading not closer than tenth (and no one testing full milk should read closer), you may get the following fractions smaller than tenths to figure separate: Either . 05 , .025 or .075 , all of which are quickly figured, thus-
8. Rule: Point off three places from the right of any amount of milk, and divide by 2 to get the fat for 05 . To get the fat for .025 divide by 4 ; for .075 , divide by 4 and multiply by 3 . Thus:

| Milk. | Milk. | Milk. |
| :---: | :---: | :---: |
| $2 \left\lvert\, \frac{2.540}{1.3 \text { fat }}\right.$ | $4 \left\lvert\, \frac{2.540}{.6 \text { fat }}\right.$ | $4 \left\lvert\, \frac{2.540}{.63 \times 3}=1.9\right.$ fat. |

Again, take $8,460 \mathrm{lbs}$ of milk-

$$
\begin{array}{ccc}
\text { Milk. } & \text { Milk. } & \text { Milk. } \\
\frac{8.460}{4.2 \text { fat }} & 4 \left\lvert\, \frac{8.460}{2.1 \text { fat }}\right. & 4 \left\lvert\, \frac{8.460}{2.1 \times 3}\right.
\end{array}=6.3 \text { fat. }
$$

In taking semi-monthly tests you get only .05 , which can readily be calculated, mentally, by above rule.
9. Suppose you have 30 patrons, in a lot of 50 , that have some of those extra fractions as indicated in rule under 8. With a little practice you can figure those extra fractions for 30 patrons and add their extra fat thus obtained to their other fat in less than 15 minutes' time.
ro. Ten thousand pounds is the largest amount calcuiated in this book, but any amount you may have above may he readily calculated thus: Suppose you have $14,840 \mathrm{lbs}$. milk-test, $3.4-10,000 \mathrm{lbs}$. of 3.4 milk equals

340 lbs. of butter fat. Then find calculated fat for $4,840 \mathrm{lbs}$. milk, and add to the 340 lbs . obtained from the $10,000 \mathrm{lbs}$. You will observe that the butter fat for $10,000 \mathrm{lbs}$. milk, at any test, is easily calculated mentally.

Example: 10,000 lbs.—test, $3.6=360$.

$$
\begin{aligned}
& 10,000 \mathrm{lbs} . \text {-test, } 4.2=420 \\
& 10,000 \mathrm{lbs} \text {.-test, } 3.9=390 ; \text { etc. }
\end{aligned}
$$

Many factories make tests every ten days, which would make extra fractions, spoken of on previous page, either .033 or .066 ; which would be figured thus:

Example: Milk.
$3 \left\lvert\, \frac{2360}{.8 \mathrm{fat}}\right.$

Milk.
$3 \left\lvert\, \frac{2.360}{.8 \times 2}=1.6\right.$ fat .

## INSTRUCTIONS FOR USING THE MONEY CALCULATING TABLES.

r. Suppose the total amount of money due the patrons for the month is $\$ 1,575.00$, and the total amount of butter fat delivered by the patrons is $7,000 \mathrm{lbs}$., then $\$ 1,575.00 \div 7,000=\$ .225$, the price per 1 b . for butter fat. Now turn to the Money Calculating Table, and find the . 225 table, which is used thus-
2. Suppose A has delivered 286 lbs . of butter fat, use the products in the $\$ .225$ table set after 2,8 and 6 . Thus: After 61350 After 81800 After 2450
$\$ 64.350$
which gives the correct amount of money. Use the table in a similar manner to find each patron's money. A little practice with these tab:es will convince you that they are very useful.
3. Usually secretaries manage to get the price of butter fat to an even cent, or an even half cent, by carrying over a small surplus or by making up a small deficit, to be taken out of the proceeds of the succeeding month.
4. Suppose you find by exact figures that your butter fat for the month will bring $\$ .2462$ per lb., and you have $5,250 \mathrm{lbs}$. butter fat. Now, it is a very good plan to carry over $\$ 6.30$ to the next month, and the price of your butter fat will be $\$ .245$. Then calculate your dividends by the $\$ .245$ table on page 61 , in this book. Or, suppose your exact price for butter fat was $\$ .2438$, by
drawing on the succeeding month for $\$ 6.30$, you would have $\$ .245$ per lb. of butter fat, and can make use of the same table. By thus adjusting the price to suit the tables much hard work in figuring can be avoided.
5. Secretaries who do not wish to adjust the price of butter fat as above recommended, and wish to use the price exactly as found, can greatly facilitate their work by making a table to suit their price.
6. Suppose the price per 1 b . of butter fat is found to be $\$ .268$, construct the following table, and use it per instructions given in number 2.

Thus-

$$
\begin{aligned}
& 268 \times 1=268 \\
& 268 \times 2=536 \\
& 268 \times 3=804
\end{aligned}
$$

etc., to $268 \times 9$.
The table can be made in a few minutes, and can be applied to the entire list of patrons, and will save a great amount of figuring.

You can construct tables at any price you wish, to suit the price. Suppose your exact price is $\$ .2668$, then make table thus:

$$
\begin{aligned}
& 2668 \times 1=2668 \\
& 2668 \times 2=5336 \\
& 2668 \times 3=8004 \quad \text { etc. }
\end{aligned}
$$

## INSTRUCTIONS FOR BUTTER DIVIDENDS.

r. Although it is more work to make dividends in which the actual number of pounds of butter are given, nevertheless some operators wish to make such statements to satisfy the wishes of their patrons. Those wishing to make such dividends can best determine each patron's butter by using the Surplus Butter Table, given on page 63 , as recommended by Dr. Babcock. The table will give the number of pounds of butter per 100 lbs . of milk for any test from 3 to $5.6 \%$.
2. Example: Suppose you find the surplus butter over the fat to be 1.12 , then use 1.12 column. If A's milk tests 3.6 , you will find his butter yield to be 4.032 . Suppose he delivers 2460 lbs . of milk, then, to determine his total butter, multiply 2460 (pointing off two places for hundreds), by 4.032-thus:

$$
24.60 \times 4.032=99.18+\text { lbs. butter }
$$

3. After determining each patron's butter, and the price per pound, use the Money Calculating Table to determine each patron's money, as per instructions for using the Money Calculating Tables, and if your price for butter does not correspond with any of the tables given construct a table to suit your price, as shown in No. 6, under Instructions for Using Money Calculating Tables.

## INSTRUCTIONS FOR USING THE RELATIVE VALUE TABLE.

(Showing the relative price per 100 lbs . milk.)

The $4 \%$ horizontal line of figures in heavy type is used as the guiding line, and is $4 \times$ the price of butter fat. Suppose the butter fat brings 25 cents, then the price in heavy type (horizontal line), would be $\$ 1.00$, and you would have to use the perpendicular column, in which will be found $\$ 1.00$ in heavy type; and you will find that $4.2 \%$ milk is worth $\$ 1.05 ; 4.4 \%$ milk, $\$ 1.10$; while $3 \%$ will be shown to be worth $\$ .75$. Suppose the butter fat is worth 21.12 cents, it would make the price of $4 \%$ milk 84.48 cents, and the table could not be used unless the .12 cents were dropped and the amount carried over to be taken in the succeeding month as advised under "Instructions for Using the Money Calculating Tables" in sections 3 and 4.

You will notice that in order to get the price for $4 \%$ milk to an even cent per hundred, butter fat will have to end in the fraction of $1 / 4 c, 1 / 2 c$, or $3 / 4 c$, or full cent, in every case.

You will find this table very handy for quick work, but not strictly accurate.

## HOW TO DIVIDE THE MONEY.

I. The Correct Way. Let us suppose that there is one composite test taken weekly, and

A has for the first week 2,046 lbs. milk-test, 3.2 equals fat 65.47


A's milk for month, $8,230 \mathrm{lbs}$. equals 258.57 fat.
B's " " 3.564 " " 145.38 "

C's " " 2,720 " " 117.32 "

$$
\text { Total, 14,514 Total, } 52 \mathrm{I} .27
$$

## 2. The Butter Sales.

First shipment, $4-40 \mathrm{lb}$. tubs, 160 lbs . net amount, $\$ 40.00$
Second " $2-60$ " " 120 " " 32.20
Third " 2-60 " 120 " " 30.50

Fourth " 2-60 " " 120 " " 3 . 60
Home sales, 50 " " 12.50
A drew 10 " ". 250
B drew 6 " "، $1.5^{\circ}$
Total, 586 Total, \$150.80
Cost of manufacturing 586 lbs . at 4 c .
2344
The patrons' share is,
$\$ 12736$

If 521.27 lbs . fat are worth $\$ 127.36$, I lb . of fat is worth 24.43 c .
A's share equals $258.57 \times 24.43$ c, equals $\$ 63.16$ )

N. B.-Most secretaries carry over the amount brought about by the small fractions, to save figuring. If, in the above case, we carry $\$ 2.26$ forward to the next month, we would have:
A's share equals $258.57 \times .24 \mathrm{c}$. equals $\$ 62.05) \$ 125$. 10
B's $\quad$ C's $\quad$ " $145.38 \times .24 \mathrm{c} . \quad$. $\quad 11034.89$
117.32 $\times .24 \mathrm{c}$. $\quad 28.16$
$\$ 127.36$
3. The Practical Way. Taking the same milk and the same test we find it as follows: Here we find the average test by adding the four tests together and dividing by four.
A. 8.230 lbs . milk. Average test for month $3.15=259.25 \mathrm{lbs}$ fat.
B. 3,564
$4.075=145.23$ " "
C. 2,720 " " " $4.325=117.64$ " "

Total, $14,514 \mathrm{lbs}$. milk.
Total, 522.12 " "
N. B.-We find that in this case we have nearly one pound of fat more for the total. By inspection we find that A has nearly one pound more than in the former statement, while $B$ has a trifle less and C has a trifle more.

Of course, if cows vary very widely in test and in milk yield from week to week, we would recommend the "correct way." But for general practical purpose the incorrectness of this "practical way" is so slight, and labor saved in figuring so marked, that most any one will be justified in using it.

## 4. A's Butter Statement.



## 5. Dividing Cheese Money. Taking the same fig-

 ures as in butter:

Suppose you get $\mathbf{I}, 450$ pounds cheese, selling at ten cents net,
making total amount of money.......................... . . \$145.00
Manufacturing of 1,450 @ $11 / 2$ cents per pound, equals.... 2 I. 75
Leaving patrons ........................................... $\$ 123.25$
If 521.27 pounds fat are worth $\$ 123.25$, one pound of fat is worth $23.64+$ cents.

A's share equals $258.57 \times 23.64+c$. equals $\$ 61$. 13
B's " $\quad$ " $\quad 145.38 \times 23.64+\quad$ ". $\quad 34.38$
C's " " $117.32 \times 23.64+\quad$ " $\quad 27.74$
Total
\$123.25
N. B.-In dividing the money in this case the secretary might have taken out seventy-seven cents and given it to the patrons the following month. He would then have: money, $\$ 122.48$; fat, 52 I.27; price for fat, 23.5; saving much labor in figuring.
6. A's Cheese Statement.

P. S.-Suppose A had drawn fifty pounds of cheese, and 1,400 pounds were sold to the buyer. We, of course, would have charged him the same, and would now get our pay by taking it out of the $\$ 61.13$, leaving him $\$ 61.13-\$ 5.00=\$ 56.13$.

Before closing these chapters the writer would like to add that recent investigations tend to confirm the fact that satisfactory results can be obtained by making composite tests only every ten days, or even better than that, viz.: semi-monthly. A great advantage under semimonthly composite tests would be that in making monthly dividends the secretary would have to deal with no worse fractions than tenths or five one hundredths, either of which is a very easy and simple fraction to handle; the assumption being that tests are read not closer than tenths.
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## Computating Cables

[For Convenience the Following Tables Begin with Page 29.]

| Milk. | FAT. | MILK. | FAT. | MILK. | FAT. | MILK. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | 2.9 | 51 | 147.9 | I |  | 51 | I. 5 |
| 2 | 5.8 | 52 | 150.8 | 2 |  | 52 | I. 5 |
| 3 | 8.7 | 53 | 153.7 | 3 | . I | 53 | 1.5 |
| 4 | II 6 | 54 | 156.6 | 4 | . 1 | 54 | 1.5 |
| 5 | 14.5 | 55 | I 59.5 | 5 | . 1 | 55 | I. 6 |
| 6 | 17.4 | 56 | 162.4 | 6 | . 2 | 56 | I. 6 |
| 7 | 20.3 | 57 | 165.3 | 7 | . 2 | 57 | I. 6 |
| 8 | 23.2 | 58 | 168.2 | 8 | . 2 | 58 | 1.7 |
| 9 | 26.1 | 59 | 171.1 | 9 | . 2 | 59 | 1.7 |
| 10 | 29.0 | 60 | 174.0 | 10 | . 3 | 60 | 1.7 |
| 11 | 31.9 | 61 | 176.9 | 1 I | . 3 | 61 | 1.7 |
| 12 | 34.8 | 62 | 179.8 | 12 | . 3 | 62 | I. 8 |
| 13 | 37.7 | 63 | 182.7 | 13 | . 4 | 63 | 1.8 |
| 14 | 40.6 | 64 | 185.6 | 14 | . 4 | 64 | 1.8 |
| 15 | 43.5 | 65 | 188.5 | 15 | . 4 | 65 | 1.9 |
| 16 | 46.4 | 66 | 191.4 | 16 | . 4 | 66 | 1.9 |
| 17 | 49.3 | 67 | 194.3 | 17 | . 5 | 67 | 1.9 |
| 18 | 52.2 | 68 | 197.2 | 18 | . 5 | 68 | 2.0 |
| 19 | 55.1 | 69 | 200.1 | 19 | . 5 | 69 | 2.0 |
| 20 | 58.0 | 70 | 203.0 | 20 | . 6 | 70 | 2.0 |
| 21 | 60.9 | 71 | 205.9 | 21 | . 6 | 71 | 2.0 |
| 22 | 63.8 | 72 | 208.8 | 22 | . 6 | 72 | 2.1 |
| 23 | 66.7 | 73 | 211.7 | 23 | . 6 | 73 | 2.1 |
| 24 | 69.6 | 74 | 214.6 | 24 | .7 | 74 | 2.1 |
| 25 | 72.5 | 75 | 217.5 | 25 | .7 | 75 | 2.1 |
| 26 | 75.4 | 76 | 22.0 .4 | 26 | . 7 | 76 | 2.2 |
| 27 | 78.3 | 77 | 223.3 | 27 | . 8 | 77 | 2.2 |
| 28 | 8 S .2 | 78 | 225.2 | 28 | . 8 | 78 | 2.2 |
| 29 | 84.1 | 79 | 229.1 | 29 | . 8 | 79 | 2.3 |
| 30 | 87.0 | 80 | 232.0 | 30 | . 9 | 80 | 2.3 |
| 31 | 89.9 | 81 | 234.9 | 31 | . 9 | 81 | 2.3 |
| 32 | 92.8 | 82 | 237.8 | 32 | . 9 | 82 | 2.4 |
| 33 | 95.7 | 83 | 240.7 | 33 | . 9 | 83 | 2.4 |
| 34 | 98.6 | 84 | 243.6 | 34 | I. 0 | 84 | 2.4 |
| 35 | 101.5 | 85 | 246.5 | 35 | 1.0 | 85 | 2.4 |
| 36 | 104.4 | 86 | 249.4 | 36 | I. 0 | 86 | 2.5 |
| 37 | 107.3 | 87 | 252.3 | 37 | I. I | 87 | 2.5 |
| 38 | 110.2 | 88 | 255.2 | 38 | I. 1 | 88 | 2.5 |
| 39 | 113.1 | 89 | 258.1 | 39 | I. 1 | S9 | 2.6 |
| 40 | 116.0 | 90 | 261.0 | 40 | 1.1 | 90 | 2.6 |
| 4 I | 118.9 | 9 I | 263.9 | 41 | 1.2 | 9 I | 2.6 |
| 42 | 121.8 | 92 | 266.8 | 42 | 1.2 | 92 | 2.6 |
| 43 | 124.7 | 93 | 269.7 | 43 | 1.2 | 93 | 2.7 |
| 44 | 127.6 | 94 | 272.6 | 44 | 1.3 | 94 | 2.7 |
| 45 | 130.5 | 95 | 275.5 | 45 | 1.3 | 95 | 2.7 |
| 46 | r33 4 | 96 | 278.4 | 46 | 1.3 | 96 | 2.8 |
|  | 136.3 | 97 | 281.3 | 47 | 1.3 | 97 | 2.8 |
| 48 | 139.2 | 98 | 284.2 | 48 | I. 4 | 98 | 2.8 |
| 49 | 142.1 | 99 | 287.1 | 49 | I. 4 | 99 | 2.9 |
| 50 | 145.0 | 100 | 290.0 | 50 | 1.4 | 100 | 2.9 |


| MiLk. | FAT. | milk. | FAT. | milk. | Fat. | мilk. | fat. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 3.0 | 51 | 153.0 | 1 |  | 51 | 1.5 |
| 2 | 6.0 | 52 | 156.0 | 2 |  | 52 | 1.5 |
| 3 | 9.0 | 53 | 159.0 | 3 | . 1 | 53 | 1.6 |
| 4 | 12.0 | 54 | 162.0 | 4 | . | 54 | 1.6 |
| 5 | 15.0 | 55 | 165.0 | 5 | . I | 55 | I. 6 |
| 6 | 18.0 | 56 | 168.0 | 6 | . 2 | 56 | 1.7 |
| 7 | 21.0 | 57 | 171.0 | 7 | 2 | 57 | 1.7 |
| S | 24.0 | 58 | 174.0 | 8 | . 2 | 58 | 1.7 |
| 9 | 27.0 | 59 | 177.0 | 9 | $\cdot 3$ | 59 | 1.8 |
| 10 | 30.0 | 60 | 180.0 | 10 | . 3 | 60 | 1.8 |
| 1 I | 33.0 | 61 | 183.0 | 1 | . 3 | 61 | 1.8 |
| 12 | 36.0 | 62 | 186.0 | 12 | . 3 | 62 | 1.8 |
| 13 | 39.0 | 63 | 189.0 | 13 | . 4 | 63 | 1.9 |
| 14 | 42.0 | 64 | 192.0 | 14 | . 4 | 64 | 1.9 |
| 15 | 45.0 | 65 | 195.0 | 15 | . 4 | 65 | 1.9 |
| 16 | 48.0 | 66 | 198.0 | 16 | . 5 | 66 | 2.0 |
| 17 | 5 I .0 | 67 | 201.0 | 17 | . 5 | 67 | 2.0 |
| 18 | 54.0 | 68 | 204.0 | 18 | . 5 | 68 | 2.0 |
| 19 | 57.0 | 69 | 207.0 | 19 | . 6 | 69 | 2.1 |
| 20 | 60.0 | 70 | 210.0 | 20 | . 6 | 70 | 2.1 |
| 21 | 63.0 | 71 | 213.0 | 21 | . 6 | 71 | 2.1 |
| 22 | 66.0 | 72 | 216.0 | 22 | . 6 | 72 | 2.1 |
| 23 | 69.0 | 73 | 219.0 | 23 | .7 | 73 | 2.2 |
| 24 | 72.0 | 74 | 222.0 | 24 | .7 | 74 | 2.2 |
| 25 | 75.0 | 75 | 225.0 | 25 | .7 | 75 | 2.2 |
| 26 | 78.0 | 76 | 228.0 | 26 | . 8 | 76 | 2.3 |
| 27 | 81.0 | 77 | 231.0 | 27 | . 8 | 77 | 2.3 |
| 28 | 84.0 | 78 | 234.0 | 28 | . 8 | 78 | 2.3 |
| 29 | 87.0 | 79 | 237.0 | 29 | . 9 | 79 | 2.4 |
| 30 | 90.0 | 80 | 240.0 | 30 | . 9 | 80 | 2.4 |
| 31 | 93.0 | 8 I | 243.0 | 31 | . 9 | 8 I | 2.4 |
| 32 | 96.0 | 82 | 246.0 | 32 | .9 | 82 | 2.5 |
| 33 | 99.0 | 83 | 249.0 | 33 | 1.0 | 83 | 2.5 |
| 34 | 102.0 | 84 | 252.0 | 34 | 1.0 | 84 | 2.5 |
| 35 | 105.0 | 85 | 255.0 | 35 | 1.0 | 85 | 2.5 |
| 36 | 108.0 | 86 | 258.0 | 36 | I. I | 86 | 2.6 |
| 37 | III. 0 | 87 | 261.0 | 37 | I. I | 87 | 2.6 |
| 38 | 114.0 | 83 | 264.0 | 38 | 1.1 | S8 | 2.6 |
| 39 | 117.0 | 89 | 267.0 | 39 | 1.2 | 89 | 2.7 |
| 40 | 120.0 | 90 | 270.0 | 40 | 1.2 | 90 | 2.7 |
| 41 | 123.0 | 9 I | 273.0 | 41 | 1.2 | 91 | 2.7 |
| 42 | 126.0 | 92 | 276.0 | 42 | 1.2 | 92 | 2.7 |
| 43 | 129.0 | 93 | 279.0 | 43 | 1.3 | 93 | 2.8 |
| 44 | 132.0 | 94 | 282.0 | 44 | 1.3 | 94 | 2.8 |
| 45 | 135.0 | 95 | 285.0 | 45 | 1.3 | 95 | 2.8 |
| 46 | 138.0 | 96 | 288.0 | 46 | 1.4 | 96 | 2.9 |
| 47 | 141.0 | 97 | 291.0 | 47 | 1.4 | 97 | 2.9 |
| 48 | 144.0 | 98 | 294.0 | 48 | 1.4 | 98 | 2.9 |
| 49 | 147.0 | 99 | 297.0 | 49 | 1. 5 | 99 | 3.0 |
| 50 | 150.0 | 100 | 300.0 | 50 | 1.5 | 100 | 3.0 |


| MILK. | FAT. | milk. | FAT. | MILK. | FAT. | MILK. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | 3.1 | 51 | 158.1 | 1 |  | 51 | I. 6 |
| 2 | 6.2 | 52 | 161.2 | 2 |  | 52 | I. 6 |
| 3 | 9.3 | 53 | 164.3 | 3 | . 1 | 53 | 1.6 |
| 4 | 12.4 | 54 | 167.4 | 4 | . 1 | 54 | 1.7 |
| 5 | 155 | 55 | 170.5 | 5 | . | 55 | 1.7 |
| 6 | 18.6 | 56 | 173.6 | 6 | . 2 | 56 | 1.7 |
| 7 | 21.7 | 57 | 176.7 | 7 | 2 | 57 | 1.7 |
| 8 | 24.8 | 58 | 179.8 | 8 | . 2 | 58 | 1.8 |
| 9 | 27.9 | 59 | 182.9 | 9 | . 3 | 59 | 1.8 |
| 10 | 31.0 | 60 | 186.0 | 10 | . 3 | 60 | 1.8 |
| 11 | 34.1 | 61 | 189.1 | 11 | . 3 | 61 | 1.8 |
| 12 | 37.2 | 62 | 192.2 | 12 | . 4 | 62 | 1.9 |
| 13 | 40.3 | 63 | 195.3 | 13 | . 4 | 63 | 1.9 |
| 14 | 43.4 | 64 | 198.4 | 14 | . 4 | 64 | 2.0 |
| 15 | 46.5 | 65 | 201.5 | 15 | . 4 | 65 | 2.0 |
| 16 | 49.6 | 66 | 204.6 | 16 | . 5 | 66 | 2.0 |
| 17 | 527 | 67 | 207.7 | 17 | . 5 | 67 | 2.1 |
| 18 | 55.8 | 68 | 210.8 | 18 | . 5 | 68 | 2.1 |
| 19 | 58.9 | 69 | 213.9 | 19 | . 6 | 69 | 2.1 |
| 20 | 62.0 | 70 | 217.0 | 20 | . 6 | 70 | 2.2 |
| 21 | 65.1 | 71 | 220. 1 | 21 | . 6 | 71 | 2.2 |
| 22 | 68.2 | 72 | 223.2 | 22 | . 7 | 72 | 2.2 |
| 23 | 71.3 | 73 | 226.3 | 23 | . 7 | 73 | 2.2 |
| 24 | 74.4 | 74 | 229.4 | 24 | . 7 | 74 | 2.3 |
| 25 | 77.5 | 75 | 232.5 | 25 | . 8 | 75 | 2.3 |
| 26 | 80.6 | 76 | 235.6 | 26 | . 8 | 76 | 2.3 |
| 27 | 83.7 | 77 | 238.7 | 27 | . 8 | 77 | 2.4 |
| 28 | 86.8 | 78 | 241.8 | 28 | . 8 | 78 | 2.4 |
| 29 | 89.9 | 79 | 244.9 | 29 | . 9 | 79 | 2.4 |
| 30 | 93.0 | 80 | 248.0 | 30 | . 9 | 80 | 2.5 |
| 31 | 96.1 | 81 | 251.1 | 31 | . 9 | 81 | 2.5 |
| 32 | 99.2 | 82 | 254.2 | 32 | 1.0 | 82 | 2.5 |
| 33 | 102.3 | 83 | 257.3 | 33 | 1.0 | 83 | 2.6 |
| 34 | 105.4 | 84 | 260.4 | 34 | 1.0 | 84 | 2.6 |
| 35 | 108. 5 | 85 | 263.5 | 35 | I. I | 85 | 2.6 |
| 36 | III. 6 | 86 | 266.6 | 36 | 1. I | 86 | 2.6 |
| 37 | 114.7 | 87 | 269.7 | 37 | 1.1 | 87 | 2.7 |
| 38 | 117.8 | 88 | 272.8 | 38 | 1.2 | 88 | 2.7 |
| 39 | 120.9 | 89 | 275.9 | 39 | 1.2 | 89 | 2.7 |
| 40 | 124.0 | 90 | 279.0 | 40 | 1.2 | 90 | 2.8 |
| 41 | 127.1 | 91 | 282.1 | 41 | 1.3 | 91 | 2.8 |
| 42 | 130.2 | 92 | 285.2 | 42 | 1.3 | 92 | 2.8 |
| 43 | 13.3 .3 | 93 | 288.3 | 43 | 1.3 | 93 | 2.9 |
| 44 | 136.4 | 94 | 291.4 | 44 | 1.3 | 94 | 2.9 |
| 45 | 139.5 | 95 | 294.5 | 45 | 1.4 | 95 | 2.9 |
| 46 | 142.6 | 96 | 297.6 | 46 | 1.4 | 96 | 3.0 |
| 47 | 145.7 | 97 | 300.7 | 47 | 1.4 | 97 | 3.0 |
| 48 | 148.8 | 98 | 303.8 | 48 | 1.5 | 98 | 3.0 |
| 49 | 151.9 | 99 | 306.9 | 49 | I. 5 | 99 | 3.0 |
| 50 | 155.0 | 100 | 3100 | 50 | 1.5 | 100 | 3.1 |


| milk. | FAT. | Milk. | FAT. | milk. | FAT. | milk. | Fat. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 3.2 | 51 | 163.2 | 1 |  | 51 | 1.6 |
| 2 | 6.4 | 52 | 166.4 | 2 |  | 52 | 1.6 |
| 3 | 9.6 | 53 | 169.6 | 3 | . | 53 | 1.7 |
| 4 | 12.8 | 54 | 172.8 | 4 | . 1 | 54 | 1.7 |
| 5 | 16.0 | 55 | 176.0 | 5 | . 1 | 55 | 1.7 |
| 6 | 19.2 | 56 | 179.2 | 6 | . 2 | 56 | 1.8 |
| 7 | 22.4 | 57 | 182.4 | 7 | . 2 | 57 | 1.8 |
| 8 | 25.5 | 58 | 185.6 | 8 | . 2 | 58 | 1.8 |
| 9 | 28.8 | 59 | 188.8 | 9 | . 3 | 59 | 1.9 |
| 10 | 32.0 | 60 | 192.0 | 10 | . 3 | 60 | 1.9 |
| 11 | 35.2 | 61 | 195.2 | 1 I | . 3 | 61 | I. 9 |
| 12 | 38.4 | 62 | 198.4 | 12 | . 4 | 62 | 2.0 |
| 13 | 41.6 | 63 | 201.6 | 13 | . 4 | 63 | 2.0 |
| 14 | 44.8 | 64 | 204.8 | 14 | . 4 | 64 | 2.0 |
| 15 | 48.0 | 65 | 208.0 | 15 | . 5 | 65 | 2.1 |
| 16 | 51.2 | 66 | 211.2 | 16 | . 5 | 66 | 2.1 |
| 17 | 54.4 | 67 | 214.4 | 17 | . 5. | 67 | 2.1 |
| 18 | 57.6 | 68 | 217.6 | 18 | . 6 | 68 | 2.2 |
| 19 | 60.8 | 69 | 220.8 | 19 | . 6 | 69 | 2.2 |
| 20 | 64.0 | 70 | 224.0 | 20 | . 6 | 70 | 2.2 |
| 21 | 67.2 | 7 I | 227.2 | 21 | . 7 | 71 | 2.3 |
| 22 | 70.4 | 72 | 230.4 | 22 | . 7 | 72 | 2.3 |
| 23 | 73.6 | 73 | 233.6 | 23 | . 7 | 73 | 2.3 |
| 24 | 76.8 | 74 | 236.8 | 24 | . 7 | 74 | 2.3 |
| 25 | 80.0 | 75 | 240.0 | 25 | . 8 | 75 | 2.4 |
| 26 | 83.2 | 76 | 243.2 | 26 | . 8 | 76 | 2.4 |
| 27 | 86.4 | 77 | 246.4 | 27 | . 8 | 77 | 2.4 |
| 28 | 89.6 | 78 | 249.6 | 28 | . 9 | 78 | 2.5 |
| 29 | 92.8 | 79 | 252.8 | 29 | . 9 | 79 | 2.5 |
| 30 | 96.0 | 80 | 256.0 | 30 | . 9 | 80 | 2.5 |
| 3 I | 99.2 | 81 | 259.2 | 3 I | 1.0 | 81 | 2.6 |
| 32 | 102.4 | 82 | 262.4 | 32 | I. 0 | 82 | 2.6 |
| 33 | 105.6 | 83 | 265.6 | 33 | 1.0 | 83 | 2.6 |
| 34 | 108.8 | 84 | 268.8 | 34 | 1.1 | 84 | 2.7 |
| 35 | 112.0 | 85 | 272.0 | 35 | I. I | 85 | 2.7 |
| 36 | II 5.2 | 86 | 275.2 | 36 | I. I | 86 | 2.7 |
| 37 | 118.4 | 87 | 278.4 | 37. | 1.2 | 87 | 2.8 |
| 38 | 121.6 | 88 | 281.6 | 38 | 1.2 | 85 | 2.8 |
| 39 | 124.8 | 89 | 284.8 | 39 | 1.2 | 89 | 2.8 |
| 40 | 128.0 | 90 | 288.0 | 40 | 1.3 | 90 | 2.9 |
| 4 I | 131.2 | 91 | 291.2 | 41 | 1.3 | 91 | 2.9 |
| 42 | 134.4 | 92 | 294.4 | 42 | 1.3 | 92 | 2.9 |
| 43 | 137.6 | 93 | 297.6 | 43 | 1.4 | 93 | 3.0 |
| 44 | 140.8 | 94 | 300.8 | 44 | 1.4 | 94 | 3.0 |
| 45 | 144.0 | 95 | 304.0 | 45 | 1.4 | 95 | 3.0 |
| 46 | 147.2 | 96 | 307.2 | 46 | 1.5 | 96 | 3.1 |
| 47 | 150.4 | 97 | 310.4 | 47 | 1.5 | 97 | 3.1 |
| 48 | 153.6 | 98 | 313.6 | 48 | 1.5 | 98 | 3.1 |
| 49 | 156.8 | 99 | 316.8 | 49 | I. 5 | 99 | 3.1 |
| 50 | 160.0 | 100 | 320.0 | 50 | 1.6 | 100 | 3.2 |


| MILK. | FAT. | MILK. | fat. | Milk. | fat. | milk. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $3 \cdot 3$ | 51 | 168.3 | I |  | 51 | 1.7 |
| 2 | 6.6 | 52 | 171.6 | 2 |  | 52 | 1.7 |
| 3 | 9.9 | 53 | 174.9 | 3 | . 1 | 53 | 1.7 |
| 4 | 13.2 | 54 | 178.2 | 4 | . 1 | 54 | 1.8 |
| 5 | 16.5 | 55 | 181.5 | 5 | . I | 55 | 1.8 |
| 6 | 19.8 | 56 | 184.8 | 6 | . 2 | 56 | 1.8 |
| 7 | 23.1 | 57 | 188.1 | 7 | 2 | 57 | 1.9 |
| 8 | 26.4 | 58 | 191.4 | 8 | 2 | 58 | 1.9 |
| 9 | 29.7 | 59 | 194.7 | 9 | . 3 | 59 | 1.9 |
| 10 | 33.0 | 60 | 198.0 | 10 | . 3 | 60 | 2.0 |
| 11 | 36.3 | 61 | 201.3 | 11 | . 3 | 61 | 2.0 |
| 12 | 39.6 | 62 | 204.6 | 12 | . 4 | 62 | 2.0 |
| 13 | 42.9 | 63 | 207.9 | 13 | . 4 | 63 | 2.1 |
| 14 | 46.2 | 64 | 211.2 | 14 | . 4 | 64 | 2.1 |
| 15 | 49.5 | 65 | 214.5 | 15 | . 5 | 65 | 2.1 |
| 16 | 52.8 | 66 | 217.8 | 16 | . 5 | 66 | 2.2 |
| 17 | 56.1 | 67 | 221.1 | 17 | . 5 | 67 | 2.2 |
| 18 | 59.4 | 68 | 224.4 | 18 | . 6 | 68 | 2.2 |
| 19 | 62.7 | 69 | 227.7 | 19 | . 6 | 69 | 2.3 |
| 20 | 66.0 | 70 | 231.0 | 20 | . 6 | 70 | 2.3 |
| 21 | 69.3 | 71 | 234.3 | 21 | . 7 | 71 | 2.3 |
| 22 | 72.6 | 72 | 237.6 | 22 | . 7 | 72 | 2.4 |
| 23 | 75.9 | 73 | 240.9 | 23 | . 7 | 73 | 2.4 |
| 24 | 79.2 | 74 | 244.2 | 24 | . 8 | 74 | 2.4 |
| 25 | 82.5 | 75 | 247.5 | 25 | . 8 | 75 | 2.5 |
| 26 | 85.8 | 76 | 250.8 | 26 | . 8 | 76 | 2.5 |
| 27 | 89.1 | 77 | 254.1 | 27 | . 9 | 77 | 2.5 |
| 28 | 92.4 | 78 | 257.4 | 28 | . 9 | 78 | 2.6 |
| 29 | 95.7 | 79 | 260.7 | 29 | . 9 | 79 | 2.6 |
| 30 | 99.0 | 80 | 264.0 | 30 | 1.0 | 80 | 2.6 |
| 31 | 102.3 | 8 I | 267.3 | 31 | 1.0 | 81 | 2.7 |
| 32 | 105.6 | 82 | 270.6 | 32 | 1.0 | 82 | 2.7 |
| 33 | 108.9 | 83 | 273.9 | 33 | I. 1 | 83 | 2.7 |
| 34 | 112.2 | 84 | 277.2 | 34 | I. 1 | 84 | 2.8 |
| 35 | 115.5 | 85 | 280.5 | 35 | 1.1 | 85 | 2.8 |
| 36 | 118.8 | 86 | 283.8 | 36 | 1.2 | 86 | 2.8 |
| 37 | 122.1 | 87 | 287.1 | 37 | 1.2 | 87 | 2.9 |
| 38 | 125.4 | 88 | 290.4 | 38 | 1.2 | 88 | 2.9 |
| 39 | 128.7 | 89 | 293.7 | 39 | 1.3 | 89 | 2.9 |
| 40 | 132.0 | 90 | 297.0 | 40 | 1.3 | 90 | 3.0 |
| 41 | 135.3 | 91 | 300.3 | 4 I | 1.3 | 91 | 3.0 |
| 42 | 138.6 | 92 | 303.6 | 42 | 1.4 | 92 | 3.0 |
| 43 | 141.9 | 93 | 306.9 | 43 | 1.4 | 93 | 3.0 |
| 44 | 145.2 | 94 | 310.2 | 44 | 1.4 | 94 | 3.1 |
| 45 | 148.5 | 95 | 313.5 | 45 | I. 5 | 95 | 3.1 |
| 46 | 1518 | 96 | 316.8 | 46 | I. 5 | 96 | 3.1 |
| 47 | 155.1 | 97 | 320.1 | 47 | 1.5 | 97 | 3.2 |
| 48 | 158.4 | 98 | 323.4 | 48 | 1.6 | 98 | 3.2 |
| 49 | 161.7 | 99 | 326.7 | 49 | 1.6 | 99 | 3.2 |
| 50 | 165.0 | 100 | 330.0 | 50 | 1.6 | 100 | 3.3 |

3.4 PER CENT. TEST.

| MiLk. | Fat. | Milk. | FAT. | milk. | FAT. | milk. | FAt. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 3.4 | 51 | 173.4 | 1 |  | 51 | 1.7 |
| 2 | 6.8 | 52 | 176.8 | 2 | . 1 | 52 | 1.7 |
| 3 | 10.2 | 53 | 180.2 | 3 | I | 53 | 1.8 |
| 4 | 13.6 | 54 | 183.6 | 4 | . 1 | 54 | 1.8 |
| 5 | 17.0 | 55 | 187.0 | 5 | . 2 | 55 | 1.9 |
| 6 | 20.4 | 56 | 190.4 | 6 | 2 | 56 | 1.9 |
| 7 | 23.8 | 57 | 193.8 | 7 | . 2 | 57 | 1.9 |
| 8 | 27.2 | 58 | 197.2 | 8 | . 3 | 58 | 2.0 |
| 9 | 30.6 | 59 | 200.6 | 9 | . 3 | 59 | 2.0 |
| 10 | 34.0 | 60 | 204.0 | 10 | . 3 | 60 | 2.0 |
| 11 | 37.4 | 61 | 207.4 | 1 I | . 4 | 61 | 2.1 |
| 12 | 40.8 | 62 | 210.8 | 12 | . 4 | 62 | 2.1 |
| 13 | 44.2 | 63 | 214.2 | 13 | . 4 | 63 | 2.1 |
| 14 | 47.6 | 64 | 217.6 | 14 | . 5 | 64 | 2.2 |
| 15 | 51.0 | 65 | 221.0 | 15 | . 5 | 65 | 2.2 |
| 16 | 54.4 | 66 | 224.4 | 16 | . 5 | 66 | 2.2 |
| 17 | 57.8 | 67 | 227.8 | 17 | . 6 | 67 | 2.3 |
| 18 | 61.2 | 68 | 231.2 | 18 | . 6 | 68 | 2.3 |
| 19 | 64.6 | 69 | 234.6 | 19 | . 6 | 69 | 2.3 |
| 20 | 68.0 | 70 | 238.0 | 20 | . 7 | 70 | 2.4 |
| 21 | 71.4 | 7 I | 24 I .4 | 21 | . 7 | 71 | 2.4 |
| 22 | 74.8 | 72 | 244.8 | 22 | . 7 | 72 | 2.4 |
| 23 | 78.2 | 73 | 248.2 | 23 | . 8 | 73 | 2.5 |
| 24 | 8 8 .6 | 74 | 251.6 | 24 | . 8 | 74 | 2.5 |
| 25 | 85.0 | 75 | 255.0 | 25 | . 8 | 75 | 2.5 |
| 26 | 88.4 | 76 | 258.4 | 26 | . 9 | 76 | 2.6 |
| 27 | 91.8 | 77 | 261. 8 | 27 | . 9 | 77 | 2.6 |
| 28 | 95.2 | 78 | 265.2 | 28 | . 9 | 78 | 2.6 |
| 29 | 98.6 | 79 | 268.6 | 29 | 1.0 | 79 | 2.7 |
| 30 | 102.0 | 80 | 272.0 | 30 | 1.0 | 80 | 2.7 |
| 31 | 105.4 | 8 I | 275.4 | 31 | 1.0 | 81 | 2.7 |
| 32 | 108.8 | 82 | 278.8 | 32 | I. I | 82 | 2.8 |
| 33 | 112.2 | 83 | 282.2 | 33 | I. 1 | 83 | 2.8 |
| 34 | 115.6 | 84 | 285.6 | 34 | 1.1 | 84 | 2.8 |
| 35 | 119.0 | 85 | 289.0 | 35 | 1.2 | 85 | 2.9 |
| 36 | 122.4 | 86 | 292.4 | 36 | 1.2 | 86 | 2.9 |
| 37 | 125.8 | 87 | 295.8 | 37 | 1.2 | 87 | 2.9 |
| 38 | 129.2 | 88 | 299.2 | 38 | 1.3 | 88 | 3.0 |
| 39 | 132.6 | 89 | 302.6 | 39 | 1.3 | 89 | 3.0 |
| 40 | 136.0 | 90 | 306.0 | 40 | 1.3 | 90 | 3.0 |
| 41 | 139.4 | 91 | 309.4 | 41 | 1.4 | 91 | 3.1 |
| 42 | 142.8 | 92 | 312.8 | 42 | 1.4 | 92 | 3.1 |
| 43 | 146.2 | 93 | 316.2 | 43 | I. 4 | 93 | 3.1 |
| 44 | 149.6 | 94 | 319.6 | 44 | 1.5 | 94 | 3.2 |
| 45 | 153.0 | 95 | 323.0 | 45 | 1.5 | 95 | 3.2 |
| 46 | 156.4 | 96 | 326.4 | 46 | 1.5 | 96 | 3.2 |
| 47 | 159.8 | 97 | 329.8 | 47 | I. 6 | 97 | 3.3 |
| 48 | 163.2 | 98 | 333.2 | 48 | 1.6 | 98 | $3 \cdot 3$ |
| 49 | 165.6 | 99 | 336.6 | 49 | 1.6 | 99 | $3 \cdot 3$ |
| 50 | 170.0 | 100 | 340.0 | 50 | 1.7 | 100 | 3.4 |


| MILK. | FAT. | MILK. | FAT. | milk. | FAT. | milk. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $3 \cdot 5$ | 51 | 178.5 | 1 |  | 51 | 1.8 |
| 2 | 7.0 | 52 | 182.0 | 2 | . | 52 | 1.8 |
| 3 | 10.5 | 53 | IS5.5 | 3 | . 1 | 53 | 1.8 |
| 4 | 14.0 | 54 | IS9.0 | 4 | . | 54 | 1.9 |
| 5 | 17.5 | 55 | 192.5 | 5 | . 2 | 55 | I. 9 |
| 6 | 21.0 | 56 | 196.0 | 6 | . 2 | 56 | 1.9 |
| 7 | 24.5 | 57 | 199.5 | 7 | . 2 | 57 | 2.0 |
| 8 | 28.0 | 58 | 203.0 | 8 | . 3 | 58 | 2.0 |
| 9 | 31.5 | 59 | 205.5 | 9 | . 3 | 59 | 2.0 |
| 10 | 35.0 | 60 | 210.0 | 10 | . 3 | 60 | 2.1 |
| 11 | 38.5 | 61 | 213.5 | 11 | . 4 | 61 | 2.1 |
| 12 | 42.0 | 62 | 217.0 | 12 | . 4 | 62 | 2.2 |
| 13 | 45.5 | 63 | 220.5 | 13 | . 4 | 63 | 2.2 |
| 14 | 49.0 | 64 | 224.0 | 14 | . 5 | 64 | 2.2 |
| 15 | 52.5 | 65 | 227.5 | 15 | . 5 | 65 | 2.3 |
| 16 | 56.0 | 66 | 231.0 | 16 | . 5 | 66 | 2.3 |
| 17 | 59.5 | 67 | 234.5 | 17 | . 6 | 67 | 2.3 |
| 18 | 63.0 | 68 | 238.0 | 18 | . 6 | 68 | 2.4 |
| 19 | 66.5 | 69 | 241.5 | 19 | . 6 | 69 | 2.4 |
| 20 | 70.0 | 70 | 245.0 | 20 | . 7 | 70 | 2.4 |
| 21 | 73.5 | 71 | 248.5 | 21 | . 7 | 71 | 2.5 |
| 22 | 77.0 | 72 | 252.0 | 22 | . 8 | 72 | 2.5 |
| 23 | 80.5 | 73 | 255.5 | 23 | . 8 | 73 | 2.5 |
| 24 | 84.0 | 74 | 259.0 | 24 | . 8 | 74 | 2.6 |
| 25 | 87.5 | 75 | 262.5 | 25 | . 9 | 75 | 2.6 |
| 26 | 91.0 | 76 | 266.0 | 26 | . 9 | 76 | 2.6 |
| 27 | 94.5 | 77 | 269.5 | 27 | . 9 | 77 | 2.7 |
| 28 | 98.0 | 78 | 273.0 | 28 | 1.0 | 78 | 2.7 |
| 29 | 101.5 | 79 | 276.5 | 29 | 1.0 | 79 | 2.7 |
| 30 | 105.0 | 80 | 280.0 | 30 | 1.0 | 80 | 2.8 |
| 3 I | 108.5 | 81 | 283.5 | 31 | I. 1 | 81 | 2.8 |
| 32 | 112.0 | 82 | 287.0 | 32 | I. I | 82 | 2.9 |
| 33 | I15.5 | 83 | 290.5 | 33 | I. I | 83 | 2.9 |
| 34 | 119.0 | 84 | 294.0 | 34 | 1.2 | 84 | 2.9 |
| 35 | 122.5 | 85 | 297.5 | 35 | 1.2 | 85 | 3.0 |
| 36 | 126.0 | 86 | 301.0 | 36 | 1.2 | 86 | 3.0 |
| 37 | 129.5 | 87 | 304.5 | 37 | 1.3 | 87 | 3.0 |
| 38 | 133.0 | 88 | 308.0 | 38 | 1.3 | 88 | 3.1 |
| 39 | 136.5 | 89 | 311.5 | 39 | I. 3 | 89 | 3.1 |
| 40 | 140.0 | 90 | 315.0 | 40 | 1.4 | 90 | 3.1 |
| 4 I | 143.5 | 91 | 318.5 | 4 I | 1.4 | 91 | 3.2 |
| 42 | 147.0 | 92 | 322.0 | 42 | 1.5 | 92 | 3.2 |
| 43 | 150.5 | 93 | 325.5 | 43 | I. 5 | 93 | 3.2 |
| 44 | 154.0 | 94 | 329.0 | 44 | I. 6 | 94 | $3 \cdot 3$ |
| 45 | 157.5 | 95 | 332.5 | 45 | 1.6 | 95 | $3 \cdot 3$ |
| 46 | 16 I .0 | 96 | 336.0 | 46 | 1.6 | 96 | $3 \cdot 3$ |
| 47 | 164.5 | 97 | 339.5 | 47 | 1. 6 | 97 | 3.4 |
| 48 | 168.0 | 98 | 343.0 | 48 | 1.7 | 98 | 3.4 |
| 49 | 171.5 | 99 | 346.5 | 49 | 1.7 | 99 | 3.4 |
| 50 | 175.0 | 100 | 350.0 | 50 | 1.7 | 100 | 3.5 |


| MILK. | fat. | milk. | FAT. | MILK. | FAT. | MILK. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 3.6 | 51 | 183.6 | 1 |  | 51 | 1.8 |
| 2 | 7.2 | 52 | 187.2 | 2 | . | 52 | 1.9 |
| 3 | 10.8 | 53 | 190.8 | 3 | .1 | 53 | 1.9 |
| 4 | 14.4 | 54 | 194.4 | 4 | . 1 | 54 | 1.9 |
| 5 | 18.0 | 55 | 198.0 | 5 | . 2 | 55 | 2.0 |
| 6 | 21.6 | 56 | 201.6 | 6 | . 2 | 56 | 2.0 |
| 7 | 25.2 | 57 | 205.2 | 7 | . 2 | 57 | 2.0 |
| 8 | 28.8 | 58 | 208.8 | 8 | . 3 | 58 | 2.1 |
| 9 | 32.4 | 59 | 212.4 | 9 | . 3 | 59 | 2.1 |
| 10 | 36.0 | 60 | 216.0 | 10 | . 3 | 60 | 2.1 |
| 11 | 39.6 | 61 | 219.6 | 11 | . 4 | 61 | 2.2 |
| 12 | 43.2 | 62 | 223.2 | 12 | . 4 | 62 | 2.2 |
| 13 | 46.8 | 63 | 226.8 | 13 | . 4 | 63 | 2.2 |
| 14 | 50.4 | 64 | 230.4 | 14 | . 5 | 64 | 2.3 |
| 15 | 54.0 | 65 | 234.0 | 15 | . 5 | 65 | 2.3 |
| 16 | 57.6 | 66 | 237.6 | 16 | . 6 | 66 | 2.4 |
| 17 | 6 I .2 | 67 | 241.2 | 17 | . 6 | 67 | 2.4 |
| 18 | 64.8 | 68 | 244.8 | 18 | . 6 | 68 | 2.4 |
| 19 | 68.4 | 69 | 248.4 | 19 | . 7 | 69 | 2.5 |
| 20 | 72.0 | 70 | 252.0 | 20 | .7 | 70 | 2.5 |
| 21 | 75.6 | 71 | 255.6 | 21 | . 7 | 7 I | 2.5 |
| 22 | 79.2 | 72 | 259.2 | 22 | . 8 | 72 | 2.6 |
| 23 | 82.8 | 73 | 262.8 | 23 | . 8 | 73 | 2.6 |
| 24 | 86.4 | 74 | 266.4 | 24 | . 8 | 74 | 2.6 |
| 25 | 90.0 | 75 | 270.0 | 25 | . 9 | 75 | 2.7 |
| 26 | 93.6 | 76 | 273.6 | 26 | . 9 | 76 | 2.7 |
| 27 | 97.2 | 77 | 277.2 | 27 | I. 0 | 77 | 2.8 |
| 28 | 100.8 | 78 | 280.8 | 28 | I. 0 | 78 | 2.8 |
| 29 | 104.4 | 79 | 284.4 | 29 | I. 0 | 79 | 2.8 |
| 30 | 108.0 | 80 | 288.0 | 30 | 1.1 | 80 | 2.9 |
| 31 | 111. 6 | 81 | 291.6 | 31 | I. I | 81 | 2.9 |
| 32 | 115.2 | 82 | 295.2 | 32 | I. 1 | 82 | 2.9 |
| 33 | 118.8 | 83 | 298.8 | 33 | 1.2 | 83 | 3.0 |
| 34 | 122.4 | 84 | 302.4 | 34 | I. 2 | 84 | 3.0 |
| 35 | 126.0 | 85 | 306.0 | 35 | 1.2 | 85 | 3.0 |
| 36 | 129.6 | 86 | 309.6 | 36 | 1.3 | 86 | 3.1 |
| 37 | 133.2 | 87 | 313.2 | 37 | 1.3 | 87 | 3.1 |
| 38 | 136.8 | 88 | 3156 | 38 | 1.3 | 88 | 3.1 |
| 39 | 140.4 | 89 | 320.4 | 39 | 1.4 | 89 | 3.2 |
| 40 | 144.0 | 90 | 324.0 | 40 | 1.4 | 90 | 3.2 |
| 41 | 147.6 | 91 | 327.6 | 41 | 1.5 | 91 | $3 \cdot 3$ |
| 42 | 151.2 | 92 | 33 I .2 | 42 | 1.5 | 92 | 3.3 |
| 43 | 154.8 | 93 | 334.8 | 43 | 1.5 | 93 | 3.3 |
| 44 | I58.4 | 94 | 338.4 | 44 | 1.6 | 94 | 3.4 |
| 45 | 162.0 | 95 | 342.0 | 45 | 1.6 | 95 | 3.4 |
| 46 | 165.6 | 96 | 345.6 | 46 | I. 6 | 96 | 3.4 |
| 47 | 169.2 | 97 | 349.2 | 47 | 1.7 | 97 | 3.5 |
| 48 | 172.8 | 98 | 352.8 | 48 | 1.7 | 98 | $3 \cdot 5$ |
| 49 | 176.4 | 99 | 356.4 | 49 | 1.7 | 99 | 3.5 |
| 50 | 180.0 | 100 | 360.0 | 50 | 1.8 | 100 | 3.6 |

3.7 PER CENT. TEST.

| MILK. | Fat. | MILK. | FAT. | MILK. | FAT. | MILK. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 3.7 | 51 | 188.7 | 1 |  | 51 | 1.9 |
| 2 | $7 \cdot 4$ | 52 | 192.4 | 2 | . 1 | 52 | 1.9 |
| 3 | II. 1 | 53 | 196.1 | 3 | . 1 | 53 | 1.9 |
| 4 | 14.8 | 54 | 199.8 | 4 | . 1 | 54 | 2.0 |
| 5 | 18.5 | 55 | 203.5 | 5 | . 2 | 55 | 2.0 |
| 6 | 22.2 | 56 | 207.2 | 6 | . 2 | 56 | 2.1 |
| 7 | 25.9 | 57 | 210.9 | 7 | . 2 | 57 | 2.1 |
| 8 | 29.6 | 58 | 214.6 | 8 | . 3 | 58 | 2.1 |
| 9 | 33.3 | 59 | 218.3 | 9 | . 3 | 59 | 2.2 |
| 10 | 37.0 | 60 | 222.0 | 10 | . 4 | 60 | 2.2 |
| 11 | 40.7 | 61 | 225.7 | 1 I | . 4 | 61 | 2.2 |
| 12 | 44.4 | 62 | 229.4 | 12 | . 4 | 62 | 2.3 |
| 13 | 48.1 | 63 | 233.1 | 13 | . 5 | 63 | 2.3 |
| 14 | 51.8 | 64 | 236.8 | 14 | . 5 | 64 | 2.3 |
| 15 | 55.5 | 65 | 240.5 | 15 | . 5 | 65 | 2.4 |
| 16 | 59.2 | 66 | 244.2 | 16 | . 6 | 66 | 2.4 |
| 17 | 62.9 | 67 | 247.9 | 17 | . 6 | 67 | 2.5 |
| 18 | 66.6 | 68 | 251.6 | 18 | . 6 | 68 | 2.5 |
| 19 | 70.3 | 69 | 255.3 | 19 | . 7 | 69 | 2.5 |
| 20 | 74.0 | 70 | 259.0 | 20 | . 7 | 70 | 2.6 |
| 21 | 77.7 | 71 | 262.7 | 21 | . 8 | 71 | 2.6 |
| 22 | 81.4 | 72 | 266.4 | 22 | . 8 | 72 | 2.6 |
| 23 | 85.1 | 73 | 270.1 | 23 | . 8 | 73 | 2.7 |
| 24 | 88.8 | 74 | 273.8 | 24 | . 9 | 74 | 2.7 |
| 25 | 92.5 | 75 | 277.5 | 25 | - 9 | 75 | 2.8 |
| 26 | 96.2 | 76 | 281.2 | 26 | .9 | 76 | 2.8 |
| 27 | 99.9 | 77 | 284.9 | 27 | 1.0 | 77 | 2.8 |
| 28 | 103.6 | 78 | 288.6 | 28 | 1.0 | 78 | 2.9 |
| 29 | 107.3 | 79 | 292.3 | 29 | I. I | 79 | 2.9 |
| 30 | 111.0 | 80 | 296.0 | 30 | 1.1 | 80 | 2.9 |
| 31 | 114.7 | 81 | 299.7 | 31 | I. I | 8 I | 3.0 |
| 32 | Ii8.4 | 82 | 303.4 | 32 | 1.2 | 82 | 3.0 |
| 33 | 122.1 | 83 | 307.1 | 33 | 1.2 | 83 | 3.1 |
| 34 | 125.8 | 84 | 310.8 | 34 | 1.2 | 84 | 3.1 |
| 35 | 129.5 | 85 | 314.5 | 35 | 1.3 | 85 | 3.1 |
| 36 | 133.2 | 86 | 318.2 | 36 | I. 3 | S6 | 3.2 |
| 37 | 136.9 | 87 | 321.9 | 37 | 1.3 | 87 | 3.2 |
| 38 | 140.6 | 88 | 325.6 | 38 | 1.4 | 88 | 3.2 |
| 39 | 144.3 | 89 | 329.3 | 39 | 1.4 | 89 | 3.3 |
| 40 | 148.0 | 90 | 333.0 | 40 | 1.5 | 90 | 3.3 |
| 41 | 151.7 | 91 | 336.7 | 41 | I. 5 | 91 | 3.3 |
| 42 | 155.4 | 92 | 340.4 | 42 | 1.5 | 92 | 3.4 |
| 43 | 159.1 | 93 | 344. ${ }^{\text {I }}$ | 43 | 1.6 | 93 | 3.4 |
| 44 | 162.8 | 94 | 347.8 | 44 | 1.6 | 94 | 3.5 |
| 45 | 166.5 | 95 | 351.5 | 45 | 1.6 | 95 | 3.5 |
| 46 | 170.2 | 96 | 355.2 | 46 | 1.7 | 96 | 3.5 |
| 47 | 173.9 | 97 | 358.9 | 47 | 1.7 | 97 | 3.6 |
| 48 | 177.6 | 98 | 362.6 | 48 | 1.8 | 98 | 3.6 |
| 49 | 181.3 | 99 | 366.3 | 49 | I. 8 | 99 | 3.6 |
| 50 | 185.0 | 100 | 370.0 | 50 | 1.8 | 100 | 3.7 |

3.8 PER CENT. TEST.

| milk. | FAT. | milk. | FAT. | MILK. | FAT. | MIL.к. | FAT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 3.8 | 51 | 193.8 | 1 |  | 51 | 1.9 |
| 2 | 7.6 | 52 | 197.6 | 2 | . 1 | 52 | 2.0 |
| 3 | II. 4 | 53 | 201.4 | 3 | . 1 | 53 | 2.0 |
| 4 | 15.2 | 54 | 205.2 | 4 | I | 54 | 2.0 |
| 5 | 19.0 | 55 | 209.0 | 5 | . 2 | 55 | 2.1 |
| 6 | 22.8 | 56 | 212.8 | 6 | 2 | 56 | 2.1 |
| 7 | 26.6 | 57 | 216.6 | 7 | . 2 | 57 | 2.1 |
| 8 | 30.4 | 58 | 220.4 | 8 | . 3 | 58 | 2.2 |
| 9 | 34.2 | 59 | 224.2 | 9 | . 3 | 59 | 2.2 |
| 10 | 38.0 | 60 | 228.0 | 10 | . 4 | 60 | 2.3 |
| 1 I | 4 I .8 | 6 I | 231.8 | 11 | . 4 | 6 I | 2.3 |
| 12 | 45.6 | 62 | 235.6 | 12 | . 4 | 62 | 2.3 |
| 13 | 49.4 | 63 | 239.4 | 13 | . 5 | 63 | 2.4 |
| 14 | 53.2 | 64 | 243.2 | 14 | . 5 | 64 | 2.4 |
| 15 | 57.0 | 65 | 247.0 | 15 | . 6 | 65 | 2.5 |
| 16 | 60.8 | 66 | 250.8 | 16 | . 6 | 66 | 2.5 |
| 17 | 64.6 | 67 | 254.6 | 17 | . 6 | 67 | 2.5 |
| 18 | 68.4 | 68 | 258.4 | 18 | . 7 | 68 | 2.6 |
| 19 | 72.2 | 69 | 262.2 | 19 | . 7 | 69 | 2.6 |
| 20 | 76.0 | 70 | 266.0 | 20 | . 7 | 70 | 2.6 |
| 21 | 79.8 | 71 | 269.8 | 21 | . 8 | 71 | 2.7 |
| 22 | 83.6 | 72 | 273.6 | 22 | . 8 | 72 | 2.7 |
| 23 | 87.4 | 73 | 277.4 | 23 | . 9 | 73 | 2.8 |
| 24 | 91.2 | 74 | 281.2 | 24 | . 9 | 74 | 2.8 |
| 25 | 95.0 | 75 | 285.0 | 25 | . 9 | 75 | 2.8 |
| 26 | 98.8 | 76 | 288.8 | 26 | 1.0 | 76 | 2.9 |
| 27 | 102.6 | 77 | 292.6 | 27 | 1.0 | 77 | 2.9 |
| 28 | 106.4 | 78 | 296.4 | 28 | 1.0 | 78 | 2.9 |
| 29 | 110.2 | 79 | 300.2 | 29 | 1.1 | 79 | 3.0 |
| 30 | 114.0 | 80 | 304.0 | 30 | 1.1 | 80 | 3.0 |
| 31 | 117.8 | SI | 307.8 | 31 | 1.2 | 8 r | 3.1 |
| 32 | 121.0 | 82 | 311.6 | 32 | 1.2 | 82 | 3.1 |
| 33 | 125.4 | 83 | 315.4 | 33 | 1.2 | 83 | 3.1 |
| 34 | 129.2 | 84 | 319.2 | 34 | 1.3 | 84 | 3.2 |
| 35 | 133.0 | 85 | 323.0 | 35 | 1.3 | 85 | 3.2 |
| 36 | 136.8 | 86 | 326.8 | 36 | 1.3 | 56 | 3.2 |
| 37 | 140.6 | 87 | 330.6 | 37 | 1.4 | 87 | 3.3 |
| 38 | 144.4 | 88 | 334.4 | 38 | 1.4 | 88 | 3.3 |
| 39 | 148.2 | S9 | 338.2 | 39 | 1.5 | S9 | 3.4 |
| 40 | 152.0 | 90 | 342.0 | 40 | 1.5 | 90 | 3.4 |
| 41 | 155.8 | 9 I | 345.8 | 4 I | I. 5 | 91 | 3.4 |
| 42 | 159.6 | 92 | 349.6 | 42 | 1.6 | 92 | 3.5 |
| 43 | 163.4 | 93 | 353.4 | 43 | 1.6 | 93 | 3.5 |
| 44 | 167.2 | 94 | 357.2 | 44 | 1.7 | 94 | 3.6 |
| 45 | 171.0 | 95 | 361.0 | 45 | 1.7 | 95 | 3.6 |
| 46 | 174.8 | 96 | 364.8 | 46 | 1.7 | 96 | 3.6 |
| 47 | 178.6 | 97 | 368.6 | 47 | 1.8 | 97 | 3.7 |
| 48 | 182.4 | 98 | 372.4 | 48 | 1.8 | 98 | 3.7 |
| 49 | 186.2 | 99 | 376.2 | 49 | 1.8 | 99 | 3.7 |
| 50 | 190.0 | 100 | 380.0 | 50 | 1.9 | 100 | 3.8 |


| milk. | FAT. | Milk. | FAT. | MILK. | FAT. | MILK. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 3.9 | 51 | 198.9 | I |  | 51 | 2.0 |
| 2 | 7.8 | 52 | 202.8 | 2 | . 1 | 52 | 2.0 |
| 3 | 11.7 | 53 | 206.7 | 3 | I | 53 | 2.0 |
| 4 | 15.6 | 54 | 210.6 | 4 | . 1 | 54 | 2.1 |
| 5 | 19.5 | 55 | 214.5 | 5 | . 2 | 55 | 2.1 |
| 6 | 23.4 | 56 | 218.4 | 6 | 2 | 56 | 2.2 |
| 7 | 27.3 | 57 | 222.3 | 7 | . 3 | 57 | 2.2 |
| 8 | 3 I .2 | 58 | 226.2 | 8 | . 3 | 58 | 2.2 |
| 9 | 35.1 | 59 | 230.1 | 9 | . 3 | 59 | 2.3 |
| 10 | 39.0 | 60 | \%34.0 | 10 | . 4 | 60 | 2.3 |
| 11 | 42.9 | 61 | 237.9 | 11 | . 4 | 61 | 2.4 |
| 12 | 46.8 | 62 | 241.8 | 12 | . 5 | 62 | 2.4 |
| 13 | 50.7 | 63 | 2457 | 13 | . 5 | 63 | 2.4 |
| 14 | 54.6 | 64 | 249.6 | 14 | . 5 | 64 | 2.5 |
| 15 | 58.5 | 65 | 253.5 | 15 | . 6 | 65 | 2.5 |
| 16 | 62.4 | 66 | 257.4 | 16 | . 6 | 66 | 2.6 |
| 17 | 66.3 | 67 | 261.3 | 17 | . 6 | 67 | 2.6 |
| 18 | 70.2 | 68 | 265.2 | 18 | . 7 | 68 | 2.6 |
| 19 | 74.1 | 69 | 269.1 | 19 | . 7 | 69 | 2.7 |
| 20 | 78.0 | 70 | 273.0 | 20 | . 8 | 70 | 2.7 |
| 21 | 81.9 | 71 | 276.9 | 21 | . 8 | 71 | 2.7 |
| 22 | 85.8 | 72 | 280.8 | 22 | . 8 | 72 | 2.8 |
| 23 | 89.7 | 73 | 284.7 | 23 | . 9 | 73 | 2.8 |
| 24 | 93.6 | 74 | 288.6 | 24 | . 9 | 74 | 2.9 |
| 25 | 97.5 | 75 | 292.5 | 25 | I. 0 | 75 | 2.9 |
| 26 | 101.4 | 76 | 296.4 | 26 | 1.0 | 76 | 2.9 |
| 27 | 105.3 | 77 | 300.3 | 27 | 1.0 | 77 | 3.0 |
| 28 | 109.2 | 78 | 304.2 | 28 | I. 1 | 78 | 3.0 |
| 29 | 113.1 | 79 | 308.1 | 29 | I. I | 79 | 3.1 |
| 30 | 117.0 | 80 | 312.0 | 30 | 1.2 | 80 | 3.1 |
| 31 | 120.9 | 8 I | 315.9 | 31 | 1.2 | 8 I | 3.1 |
| 32 | 124.8 | 82 | 319.8 | 32 | 1.2 | 82 | 3.2 |
| 33 | 128.7 | 83 | 323.7 | 33 | 1.3 | 83 | 3.2 |
| 34 | 132.6 | 84 | 327.6 | 34 | 1.3 | 84 | 3.3 |
| 35 | 136.5 | 85 | 33 I .5 | 35 | 1.3 | 85 | 3.3 |
| 36 | 140.4 | 86 | 335.4 | 36 | I. 4 | 86 | 3.3 |
| 37 | 144.3 | 87 | 339.3 | 37 | I. 4 | 87 | 3.4 |
| 38 | 148.2 | 88 | 343.2 | 38 | I. 5 | 88 | 3.4 |
| 39 | 152.1 | 89 | 347.1 | 39 | 1.5 | 89 | 3.5 |
| 40 | 156.0 | 90 | 351.0 | 40 | 1.5 | 90 | 3.5 |
| 41 | 159.9 | 91 | 354.9 | 41 | 1.6 | 91 | 3.5 |
| 42 | 163.8 | 92 | 358.8 | 42 | I. 6 | 92 | 3.6 |
| 43 | 167.7 | 93 | 362.7 | 43 | 1.7 | 93 | 3.6 |
| 44 | 171.6 | 94 | 366.6 | 44 | 1.7 | 94 | 3.6 |
| 45 | 175.5 | 95 | 370.5 | 45 | 1.7 | 95 | 3.7 |
| 46 | 179.4 | 96 | 374.4 | 46 | 1.8 | 96 | 3.7 |
| 47 | 183.3 | 97 | 378.3 | 47 | 1.8 | 97 | 3.8 |
| 48 | 187.2 | 98 | 382.2 | 48 | 1.9 | 98 | 3.8 |
| 49 | 191. 1 | 99 | 386.1 | 49 | 1.9 | 99 | 3.8 |
| 50 | 195.0 | 100 | 390.0 | 50 | 1.9 | 100 | 3.9 |


| MILK. | FAT. | MILK. | FAT. | milk. | FAT. | MILK. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 4.0 | 51 | 204.0 | 1 |  | 51 | 2.0 |
| 2 | S.0 | 52 | 208.0 | 2 | . 1 | 52 | 2.1 |
| 3 | 12.0 | 53 | 212.0 | 3 | . 1 | 53 | 2.1 |
| 4 | 16.0 | 54 | 216.0 | 4 | I | 54 | 2.1 |
| 5 | 20.0 | 55 | 220.0 | 5 | . 2 | 55 | 2.2 |
| 6 | 24.0 | 56 | 224.0 | 6 | 2 | 56 | 2.2 |
| 7 | 28.0 | 57 | 228.0 | 7 | . 3 | 57 | 2.3 |
| 8 | 32.0 | 58 | 232.0 | 8 | . 3 | 58 | 2.3 |
| 9 | 36.0 | 59 | 235.0 | 9 | . 3 | 59 | 2.3 |
| 10 | 40.0 | 60 | 240.0 | 10 | . 4 | 60 | 2.4 |
| 11 | 44.0 | 61 | 244.0 | 11 | . 4 | 61 | 2.4 |
| 12 | 48.0 | 62 | 248.0 | 12 | . 5 | 62 | 2.5 |
| 13 | 52.0 | 63 | 252.0 | 13 | . 5 | 63 | 2.5 |
| 14 | 56.0 | 64 | 256.0 | 14 | . 5 | 64 | 2.5 |
| 15 | 60.0 | 65 | 260.0 | 15 | . 6 | 65 | 2.6 |
| 16 | 64.0 | 66 | 264.0 | 16 | . 6 | 66 | 2.6 |
| 17 | 68.0 | 67 | 268.0 | 17 | . 7 | 67 | 2.7 |
| 18 | 72.0 | 68 | 272.0 | 18 | . 7 | 68 | 2.7 |
| 19 | 76.0 | 69 | 276.0 | 19 | . 7 | 69 | 2.7 |
| 20 | 80.0 | 70 | 280.0 | 20 | . 8 | 70 | 2.8 |
| 2 I | 84.0 | 71 | 284.0 | 2 I | . 8 | 71 | 2.8 |
| 22 | 88.0 | 72 | 288.0 | 22 | . 9 | 72 | 2.9 |
| 23 | 92.0 | 73 | 292.0 | 23 | . 9 | 73 | 2.9 |
| 24 | 86.0 | 74 | 296.0 | 24 | . 9 | 74 | 2.9 |
| 25 | 100.0 | 75 | 300.0 | 25 | I. 0 | 75 | 3.0 |
| 26 | 104.0 | 76 | 304.0 | 26 | 1.0 | 76 | 3.0 |
| 27 | 108.0 | 77 | 308.0 | 27 | I. I | 77 | 3.1 |
| 28 | 112.0 | 78 | 312.0 | 28 | I. I | 78 | 3.1 |
| 29 | 116.0 | 79 | 316.0 | 29 | 1.1 | 79 | 3.1 |
| 30 | 120.0 | 80 | 320.0 | 30 | 1.2 | 80 | 3.2 |
| 31 | 124.0 | SI | 324.0 | 31 | 1.2 | SI | 3.2 |
| 32 | 128.0 | 82 | 328.0 | 32 | 1.3 | S2 | 3.3 |
| 33 | 132.0 | 83 | 332.0 | 33 | 1.3 | 83 | 3.3 |
| 34 | 136.0 | 84 | 336.0 | 34 | 1.3 | 84 | $3 \cdot 3$ |
| 35 | 140.0 | 85 | 340.0 | 35 | 1.4 | 85 | 3.4 |
| 36 | 144.0 | 86 | 344.0 | 36 | 1.4 | 86 | 3.4 |
| 37 | 14 S .0 | 87 | 348.0 | 37 | 1.5 | 87 | 3.5 |
| 38 | 152.0 | 88 | 352.0 | 38 | 1.5 | 88 | 3.5 |
| 39 | 156 | 89 | 356.0 | 39 | 1.5 | 89 | 3.5 |
| 40 | 160.0 | 90 | 360.0 | 40 | 1.6 | 90 | 3.6 |
| 41 | 164.0 | 91 | 364.0 | 41 | I. 6 | 91 | 3.6 |
| 42 | 165.0 | 92 | 368.0 | 42 | 1.7 | 92 | 3.7 |
| 43 | 172.0 | 93 | 372.0 | 43 | 1.7 | 93 | 3.7 |
| 44 | 176.0 | 94 | 376.0 | 44 | 1.7 | 94 | 3.7 |
| 45 | 180.0 | 95 | 380.0 | 45 | 1.8 | 95 | 3.8 |
| 46 | 184.0 | 96 | 384.0 | 46 | 1.8 | 96 | 3.8 |
| 47 | 188.0 | 97 | 388.0 | 47 | 1.9 | 97 | 3.9 |
| 48 | 192.0 | 98 | 392.0 | 48 | 1.9 | 98 | 3.9 |
| 49 | 196.0 | 99 | 396.0 | 49 | 1.9 | 99 | 3.9 |
| 50 | 200.0 | 100 | 400.0 | 50 | 2.0 | 100 | 4.0 |

4.1 PER CENT. TEST.

| MILK. | FAT. | MILK. | FAT. | MILK. | FAT. | MILK. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | 4.1 | 51 | 209.1 | 1 |  | 51 | 2. I |
| 2 | 8.2 | 52 | 213.2 | 2 | . 1 | 52 | 2.1 |
| 3 | 12.3 | 53 | 217.3 | 3 | . I | 53 | 2.2 |
| 4 | 16.4 | 54 | 221.4 | 4 | . I | 54 | 2.2 |
| 5 | 20.5 | 55 | 225.5 | 5 | . 2 | 55 | 2.2 |
| 6 | 24.6 | 56 | 229.6 | 6 | . 2 | 56 | 2.3 |
| 7 | 23.7 | 57 | 233.7 | 7 | . 3 | 57 | 2.3 |
| 8 | 32.8 | 58 | 237.8 | 8 | . 3 | 58 | 2.4 |
| 9 | 36.9 | 59 | 241.9 | 9 | . 3 | 59 | 2.4 |
| 10 | 41.0 | 60 | 246.0 | 10 | . 4 | 60 | 2.4 |
| II | 45.1 | 61 | 250.1 | II | . 4 | 61 | 2.5 |
| 12 | 49.2 | 62 | 254.2 | 12 | . 5 | 62 | 2.5 |
| 13 | 53.3 | 63 | 258.3 | 13 | . 5 | 63 | 2.6 |
| 14 | 57.4 | 64 | 262.4 | 14 | . 6 | 64 | 2.6 |
| 15 | -61.5 | 65 | 266.5 | 15 | . 6 | 65 | 2.6 |
| 16 | 65.6 | 66 | 270.6 | 16 | . 6 | 66 | 2.7 |
| 17 | 69.7 | 67 | 274.7 | 17 | . 7 | 67 | 2.7 |
| I8 | 73.8 | 68 | 278.8 | 18 | . 7 | 68 | 2.8 |
| 19 | 77.9 | 69 | 282.9 | 19 | . 8 | 69 | 2.8 |
| 20 | 82.0 | 70 | 287.0 | 20 | . 8 | 70 | 2.9 |
| 21 | 86.1 | 71 | 291.I | 21 | . 8 | 71 | 2.9 |
| 22 | 90.2 | 72 | 295.2 | 22 | . 9 | 72 | 2.9 |
| 23 | 94.3 | 73 | 299.3 | 23 | . 9 | 73 | 3.0 |
| 24 | 98.4 | 74 | 303.4 | 24 | 1.0 | 74 | 3.0 |
| 25 | 102.5 | 75 | 307.5 | 25 | 1.0 | 75 | 3.1 |
| 26 | 106.6 | 76 | 311.6 | 26 | 1.0 | 76 | 3.1 |
| 27 | 110.7 | 77 | 315.7 | 27 | 1.1 | 77 | 3.1 |
| 28 | 114.8 | 78 | 319.8 | 28 | 1.I | 78 | 3.2 |
| 29 | 118.9 | 79 | 323.9 | 29 | 1.2 | 79 | 3.2 |
| 30 | 123.0 | 80 | 328.0 | 30 | 1.2 | 80 | 3.3 |
| 31 | 127.1 | 8 I | 332.1 | 31 | I. 3 | 81 | $3 \cdot 3$ |
| 32 | 131.2 | 82 | 336.2 | 32 | 1.3 | 82 | 3.3 |
| 33 | 135.3 | 83 | 340.3 | 33 | 1.3 | 83 | 3.4 |
| 34 | 139.4 | 84 | 344.4 | 34 | 1.4 | 84 | 3.4 |
| 35 | 143.5 | 85 | 348.5 | 35 | I. 4 | 85 | 3.5 |
| 36 | 147.6 | 86 | 352.6 | 36 | I. 5 | 86 | 3.5 |
| 37 | 151.7 | 87 | 356.7 | 37 | I. 5 | 87 | 3.5 |
| 38 | 1 55.8 | 88 | 360.8 | 38 | 1. 5 | 88 | 3.6 |
| 39 | 159.9 | 89 | 364.9 | 39 | 1. 6 | 89 | 3.6 |
| 40 | 164.0 | 90 | 369.0 | 40 | 1.6 | 90 | 3.7 |
| 41 | 168.1 | 91 | 373.1 | 41 | I. 7 | 91 | 3.7 |
| 42 | 172.2 | 92 | 377.2 | 42 | 1.7 | 92 | 3.8 |
| 43 | 176.3 | 93 | 381.3 | 43 | 1.7 | 93 | 3.8 |
| 44 | I So. 4 | 94 | 385.4 | 44 | 1.8 | 94 | 3.8 |
| 45 | 184.5 | 95 | 389.5 | 45 | 1.8 | 95 | 3.9 |
| 46 | 188.6 | 96 | 393.6 | 46 | 1.9 | 96 | 3.9 |
| 47 | 192.7 | 97 | 397.7 | 47 | 1.9 | 97 | 4.0 |
| 48 | 196.8 | 98 | 401.8 | 48 | I. 9 | 98 | 4.0 |
| 49 | 200.9 | 99 | 405.9 | 49 | 2.0 | 99 | 4.0 |
| 50 | 205.0 | 100 | 410.0 | 50 | 2.0 | 100 | 4.1 |


| MILK. | FAT. | MiLk. | FAT. | MILK. | FAT. | MILK. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 4.2 | 51 | 214.2 | I |  | 5 I | 2.1 |
| 2 | 8.4 | 52 | 218.4 | 2 | . 1 | 52 | 2.2 |
| 3 | 12.6 | 53 | 222.6 | 3 | . | 53 | 2.2 |
| 4 | 16.8 | 54 | 226.8 | 4 | . 1 | 54 | 2.2 |
| 5 | 21.0 | 55 | 23 I .0 | 5 | 2 | 55 | 2.3 |
| 6 | 25.2 | 56 | 235.2 | 6 | . 2 | 56 | 2.3 |
| 7 | 29.4 | 57 | 239.4 | 7 | . 3 | 57 | 2.4 |
| 8 | 33.6 | 58 | 243.6 | 8 | . 3 | 58 | 2.4 |
| 9 | 37.8 | 59 | 247.8 | 9 | . 4 | 59 | 2.5 |
| 10 | 42.0 | 60 | 252.0 | 10 | . 4 | 60 | 2.5 |
| 11 | 46.2 | 61 | 256.2 | 11 | . 4 | 61 | 2.5 |
| 12 | 50.4 | 62 | 260.4 | 12 | . 5 | 62 | 2.6 |
| 13 | 54.6 | 63 | 264.6 | 13 | . 5 | 63 | 2.6 |
| 14 | 58.8 | 64 | 268.8 | 14 | . 6 | 64 | 2.7 |
| 15 | 63.0 | 65 | 273.0 | 15 | . 6 | 65 | 2.7 |
| 16 | 67.2 | 66 | 277.2 | 16 | . 6 | 66 | 2.8 |
| 17 | 71.4 | 67 | 281.4 | 17 | . 7 | 67 | 2.8 |
| 18 | 75.6 | 68 | 285.6 | 18 | . 7 | 68 | 2.8 |
| 19 | 79.8 | 69 | 289.8 | 19 | . 8 | 69 | 2.9 |
| 20 | 84.0 | 70 | 294.0 | 20 | . 8 | 70 | 2.9 |
| 21 | 88.2 | 71 | 298.2 | 21 | . 9 | 71 | 3.0 |
| 22 | 92.4 | 72 | 302.4 | 22 | . 9 | 72 | 3.0 |
| 23 | 96.6 | 73 | 306.6 | 23 | . 9 | 73 | 3.0 |
| 24 | 100.8 | 74 | 310.8 | 24 | 1.0 | 74 | 3.1 |
| 25 | 105.0 | 75 | 315.0 | 25 | 1.0 | 75 | 3.1 |
| 26 | 109.2 | 76 | 319.2 | 26 | 1.1 | 76 | 3.2 |
| 27 | 113.4 | 77 | 323.4 | 27 | 1.1 | 77 | 3.2 |
| 28 | 117.6 | 78 | 327.6 | 28 | 1.2 | 78 | 3.3 |
| 29 | 121.8 | 79 | 331.8 | 29 | 1.2 | 79 | 3.3 |
| 30 | 126.0 | 80 | 336.0 | 30 | 1.2 | 80 | 3.3 |
| 31 | 130.2 | 81 | 340.2 | 31 | 1.3 | 81 | 3.4 |
| 32 | 134.4 | 82 | 344.4 | 32 | 1.3 | 82 | 3.4 |
| 33 | 138.6 | 83 | 348.6 | 33 | 1.4 | 83 | 3.5 |
| 34 | 142.8 | 84 | 352.8 | 34 | 1.4 | 84 | 3.5 |
| 35 | 147.0 | 85 | 357.0 | 35 | 1.5 | 85 | 3.6 |
| 36 | 151.2 | 86 | 361.2 | 36 | 1.5 | 86 | 3.6 |
| 37 | 155.4 | 87 | 365.4 | 37 | 1. 5 | 87 | 3.6 |
| 38 | 159.6 | 88 | 369.6 | 38 | 1.6 | 88 | 3.7 |
| 39 | 163.8 | 89 | 373.8 | 39 | I. 6 | 89 | 3.7 |
| 40 | 168.0 | 90 | 378.0 | 40 | 1.7 | 90 | 3.8 |
| 4 I | 172.2 | 91 | 382.2 | 41 | 1.7 | 91 | 3.8 |
| 42 | 176.4 | 92 | 386.4 | 42 | 1.7 | 92 | 3.8 |
| 43 | 180.6 | 93 | 390.6 | 43 | 1.8 | 93 | 3.9 |
| 44 | I84.8 | 94 | 394.8 | 44 | 1.8 | 94 | 3.9 |
| 45 | 189.0 | 95 | 399.0 | 45 | 1.9 | 95 | 4.0 |
| 46 | 193.2 | 96 | 403.2 | 46 | 1.9 | 96 | 4.0 |
| 47 | 197.4 | 97 | 407.4 | 47 | 2.0 | 97 | 4.1 |
| 48 | 201.6 | 98 | 411.6 | 48 | 2.0 | 98 | 4.1 |
| 49 | 205.8 | 99 | 415.8 | 49 | 2.0 | 99 | 4.1 |
| 50 | 210.0 | 100 | 420.0 | 50 | 2.1 | 100 | 4.2 |


| milk. | FAT. | MILE. | FAT. | MILK. | Fat. | milk. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $4 \cdot 3$ | 51 | 219.3 | 1 |  | 51 | 2.2 |
| 2 | 8.6 | 52 | 223.6 | 2 | . 1 | 52 | 2.2 |
| 3 | 12.9 | 53 | 227.9 | 3 | I | 53 | 2.3 |
| 4 | 17.2 | 54 | 232.2 | 4 | . 2 | 54 | 2.3 |
| 5 | 21.5 | 55 | 236.5 | 5 | . 2 | 55 | 2.3 |
| 6 | 25.8 | 56 | 240.8 | 6 | . 2 | 56 | 2.4 |
| 7 | 30.1 | 57 | 245.1 | 7 | . 3 | 57 | 2.4 |
| 8 | 34.4 | 58 | 249.4 | 8 | . 3 | 58 | 2.5 |
| 9 | 38.7 | 59 | 253.7 | 9 | . 4 | 59 | 2.5 |
| 10 | 43.0 | 60 | 258.0 | 10 | . 4 | 60 | 2.6 |
| 11 | 47.3 | 61 | 262.3 | 11 | . 5 | 61 | 2.6 |
| 12 | 51.6 | 62 | 266.6 | 12 | . 5 | 62 | 2.6 |
| 13 | 55.9 | 63 | 270.9 | 13 | . 5 | 63 | 2.7 |
| 14 | 60.2 | 64 | 275.2 | 14 | . 6 | 64 | 2.7 |
| 15 | 64.5 | 65 | 279.5 | 15 | . 6 | 65 | 2.8 |
| 16 | 68.8 | 66 | 283.8 | 16 | . 7 | 66 | 2.8 |
| 17 | 73.1 | 67 | 288.1 | 17 | . 7 | 67 | 2.9 |
| 18 | 77.4 | 68 | 292.4 | 18 | . 8 | 68 | 2.9 |
| 19 | 8 I .7 | 69 | 296.7 | 19 | . 8 | 69 | 2.9 |
| 20 | 86.0 | 70 | 301.0 | 20 | . 8 | 70 | 3.6 |
| 21 | 90.3 | 71 | 305.3 | 21 | . 9 | 71 | 3.0 |
| 22 | 94.6 | 72 | 309.6 | 22 | . 9 | 72 | 3.1 |
| 23 | 98.9 | 73 | 313.9 | 23 | 1.0 | 73 | 3.1 |
| 24 | 103.2 | 74 | 318.2 | 24 | 1.0 | 74 | 3.2 |
| 25 | 107.5 | 75 | 322.5 | 25 | I. I | 75 | 3.2 |
| 26 | 111.8 | 76 | 326.8 | 26 | I. 1 | 76 | 3.2 |
| 27 | 116.1 | 77 | 33 I .1 | 27 | I. 1 | 77 | 3.3 |
| 28 | 120.4 | 78 | 335.4 | 28 | 1.2 | 78 | 3.3 |
| 29 | 124.7 | 79 | 339.7 | 29 | 1.2 | 79 | 3.4 |
| 30 | 129.0 | 80 | 344.0 | 30 | 1.3 | 80 | 3.4 |
| 31 | 133.3 | 81 | 348.3 | 31 | 1.3 | 81 | 3.5 |
| 32 | 137.6 | 82 | 352.6 | 32 | 1.4 | 82 | 3.5 |
| 33 | 141.9 | 83 | 356.9 | 33 | 1.4 | 83 | 3.5 |
| 34 | 146.2 | 84 | 361.2 | 34 | 1.4 | 84 | 3.6 |
| 35 | 150.5 | 85 | 365.5 | 35 | 1.5 | 85 | 3.6 |
| 36 | 154.8 | 86 | 369.8 | 36 | 1.5 | 86 | 3.7 |
| 37 | 159.1 | 87 | 374. 1 | 37 | 1. 6 | 87 | 3.7 |
| 38 | 163.4 | 88 | 378.4 | 38 | 1.6 | 88 | 3.8 |
| 39 | 167.7 | 89 | 382.7 | 39 | 1.7 | 89 | 3.8 |
| 40 | 172.0 | 90 | 387.0 | 40 | 1.7 | 90 | 3.9 |
| 41 | 176.3 | 91 | 391.3 | 4 I | 1.7 | 91 | 3.9 |
| 42 | 180.6 | 92 | 395.6 | 42 | I. 8 | 92 | 3.9 |
| 43 | 184.9 | 93 | 399.9 | 43 | 1.8 | 93 | 4.0 |
| 44 | 189.2 | 94 | 404.2 | 44 | 1.9 | 94 | 4.0 |
| 45 | 193.5 | 95 | 408.5 | 45 | 1.9 | 95 | 4.1 |
| 46 | 197.8 | 96 | 412.8 | 46 | 2.0 | 96 | 4.1 |
| 47 | 202. 1 | 97 | 417.1 | 47 | 2.0 | 97 | -4.2 |
| 48 | 206.4 | 98 | 421.4 | 48 | 2.0 | 98 | 4.2 |
| 49 | 210.7 | 99 | 425.7 | 49 | 2.1 | 99 | 4.2 |
| 50 | 215.0 | 100 | 430.0 | 50 | 2.1 | 100 | 4.3 |


| Milk. | FAT. | milk. | FAT. | MILK. | FAT. | MILK. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 4.4 | 51 | 224.4 | I |  | 51 | 2.2 |
| 2 | 8.8 | 52 | 228.8 | 2 | . 1 | 52 | 2.3 |
| 3 | 13.2 | 53 | 233.2 | 3 | . I | 53 | 2.3 |
| 4 | 17.6 | 54 | 237.6 | 4 | . 2 | 54 | 2.4 |
| 5 | 22.0 | 55 | 242.0 | 5 | . 2 | 55 | 2.4 |
| 6 | 26.4 | 56 | 246.4 | 6 | . 2 | 56 | 2.4 |
| 7 | 30.8 | 57 | 250.8 | 7 | -3 | 57 | 2.5 |
| 8 | 35.2 | 58 | 255.2 | 8 | . 3 | 58 | 2.5 |
| 9 | 39.6 | 59 | 259.6 | 9 | . 4 | 59 | 2.6 |
| 10 | 44.0 | 60 | 264.0 | 10 | . 4 | 60 | 2.6 |
| 11 | 48.4 | 61 | 268.4 | II | . 5 | 61 | 2.7 |
| 12 | 52.8 | 62 | 272.8 | 12 | . 5 | 62 | 2.7 |
| 13 | 57.2 | 63 | 277.2 | 13 | . 6 | 63 | 2.8 |
| 14 | 6 E .6 | 64 | 281.6 | 14 | . 6 | 64 | 2.8 |
| 15 | 66.0 | 65 | 286.0 | 15 | . 6 | 65 | 2.8 |
| 16 | 70.4 | 66 | 290.4 | 16 | . 7 | 66 | 2.9 |
| 17 | 74.8 | 67 | 294.8 | 17 | . 7 | 67 | 2.9 |
| 18 | 79.2 | 68 | 299.2 | 18 | . 8 | 68 | 3.0 |
| 19 | 83.6 | 69 | 303.6 | 19 | . 8 | 69 | 3.0 |
| 20 | 88.0 | 70 | 308.0 | 20 | . 9 | 70 | 3.1 |
| 21 | 92.4 | 71 | 312.4 | 21 | . 9 | 71 | 3.1 |
| 22 | 96.8 | 72 | 316.8 | 22 | . 9 | 72 | 3.1 |
| 23 | 101.2 | 73 | 321.2 | 23 | 1.0 | 73 | 3.2 |
| 24 | 105.6 | 74 | 325.6 | 24 | 1.0 | 74 | 3.2 |
| 25 | 110.0 | 75 | 330.0 | 25 | I. I | 75 | $3 \cdot 3$ |
| 26 | 114.4 | 76 | 334.4 | 26 | I. I | 76 | $3 \cdot 3$ |
| 27 | 118.8 | 77 | 338.8 | 27 | 1.2 | 77 | 3.4 |
| 28 | 123.2 | 78 | 343.2 | 28 | 1.2 | 78 | 3.4 |
| 29 | 127.6 | 79 | 347.6 | 29 | 1.3 | 79 | 3.5 |
| 30 | 132.0 | 80 | 352.0 | 30 | 1.3 | 80 | 3.5 |
| 31 | 136.4 | 81 | 356.4 | 31 | 1.3 | 81 | 3.5 |
| 32 | 140.8 | 82 | 360.8 | 32 | 1.4 | 82 | 3.6 |
| 33 | 145.2 | 83 | 365.2 | 33 | 1.4 | 83 | 3.6 |
| 34 | 149.6 | 84 | 369.6 | 34 | I. 5 | 84 | 3.7 |
| 35 | 154.0 | 85 | 374.0 | 35 | I. 5 | 85 | 3.7 |
| 36 | 158.4 | S6 | 378.4 | 36 | 1.6 | 80 | 3.8 |
| 37 | 162.8 | 87 | 382.8 | 37 | $\underline{1} .6$ | 87 | 3.8 |
| 38 | 167.2 | 88 | 387.2 | 38 | 1.7 | 88 | 3.9 |
| 39 | 171.6 | 89 | 391.6 | 39 | 1.7 | 89 | 3.9 |
| 40 | 176.0 | 90 | 396.0 | 40 | 1.7 | 90 | 3.9 |
| 41 | ISo. 4 | 91 | 400.4 | 41 | 1.8 | 91 | 4.0 |
| 42 | 184.8 | 92 | 404.8 | 42 | 1.8 | 92 | 4.0 |
| 43 | 189.2 | 93 | 409.2 | 43 | 1.9 | 93 | 4.1 |
| 44 | 193.6 | 94 | 43.6 | 44 | 1.9 | 94 | 4.1 |
| 45 | 198.0 | 95 | 418.0 | 45 | 2.0 | 95 | 4.2 |
| 46 | 202.4 | 96 | 422.4 | 46 | 2.0 | 96 | 4.2 |
| 47 | 206.8 | 97 | 426.8 | 47 | 2.0 | 97 | 4.2 |
| 48 | 211.2 | 98 | 431.2 | 4 S | 2.1 | 98 | $4 \cdot 3$ |
| 49 | 215.6 | 99 | 435.6 | 49 | 2.1 | 99 | $4 \cdot 3$ |
| 50 | 220.0 | 100 | 440.0 | 50 | 2.2 | 100 | 4.4 |

4.5 PER CENT. TEST.

45

| MILK. | FAT. | MILK. | FAT. | MILK. | FAT. | MILK. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | 4.5 | 51 | 229.5 | I |  | 5 I | 2.3 |
| 2 | 9.0 | 52 | 234.0 | 2 | . 1 | 52 | 2.3 |
| 3 | 13.5 | 53 | 238.5 | 3 | . I | 53 | 2.4 |
| 4 | 18.0 | 54 | 243.0 | 4 | . 2 | 54 | 2.4 |
| 5 | 22.5 | 55 | 247.5 | 5 | . 2 | 55 | 2.5 |
| 6 | 27.0 | 56 | 252.0 | 6 | . 3 | 56 | 2.5 |
| 7 | 31.5 | 57 | 256.5 | 7 | . 3 | 57 | 2.5 |
| 8 | 36.0 | 58 | 261.0 | 8 | . 3 | 58 | 2.6 |
| 9 | 40.5 | 59 | 265.5 | 9 | . 4 | 59 | 2.6 |
| 10 | 45.0 | 60 | 270.0 | 10 | . 4 | 60 | 2.7 |
| I I | 49.5 | 6 I | 274.5 | I I | . 5 | 61 | 2.7 |
| 12 | 54.0 | 62 | 279.0 | 12 | . 5 | 62 | 2.8 |
| 13 | 58.5 | 63 | 283.5 | 13 | . 6 | 63 | 2.8 |
| 14 | 63.0 | 64 | 288.0 | 14 | . 6 | 64 | 2.9 |
| 15 | 67.5 | 65 | 292.5 | 15 | . 7 | 65 | 2.9 |
| 16 | 72.0 | 66 | 297.0 | $16^{-}$ | . 7 | 66 | 3.0 |
| 17 | 76.5 | 67 | 301.5 | 17 | . 7 | 67 | 3.0 |
| 18 | 81.0 | 68 | 306.0 | 18 | . 8 | 68 | 3.0 |
| 19 | 85.5 | 69 | 310.5 | 19 | . 8 | 69 | 3.1 |
| 20 | 90.0 | 70 | 315.0 | 20 | . 9 | 70 | 3.1 |
| 21 | 94.5 | 71 | 319.5 | 21 | . 9 | 71 | 3.2 |
| 22 | 99.0 | 72 | 324.0 | 22 | 1.0 | 72 | 3.2 |
| 23 | 103.5 | 73 | 328.5 | 23 | 1.0 | 73 | 3.3 |
| 24 | I08.0 | 74 | 333.0 | 24 | I. 1 | 74 | 3.3 |
| 25 | 112.5 | 75 | 337.5 | 25 | I. I | 75 | 3.4 |
| 26 | I 17.0 | 76 | 342.0 | 26 | I. 2 | 76 | 3.4 |
| 27 | 121.5 | 77 | 346.5 | 27 | I. 2 | 77 | 3.4 |
| 28 | 126.0 | 78 | 351.0 | 28 | 1.2 | 78 | 3.5 |
| 29 | 130.5 | 79 | 355.5 | 29 | I. 3 | 79 | 3.5 |
| 30 | 135.0 | 80 | 360.0 | 30 | 1.3 | 80 | 3.6 |
| 31 | 139.5 | 81 | 364.5 | 31 | 1.4 | 8 I | 3.6 |
| 32 | 144.0 | 82 | 369.0 | 32 | I. 4 | 82 | 3.7 |
| 33 | 148.5 | 83 | 373.5 | 33 | I. 5 | 83 | 3.7 |
| 34 | 153.0 | 84 | 378.0 | 34 | I. 5 | 84 | 3.8 |
| 35 | I 57.5 | S5 | 382.5 | 35 | I. 6 | 85 | 3.8 |
| 36 | 162.0 | 86 | 387.0 | 36 | I. 6 | 86 | 3.9 |
| 37 | 166.5 | 87 | 391.5 | 37 | I. 6 | 87 | 3.9 |
| 38 | 171.0 | 85 | 396.0 | 38 | 1.7 | 88 | 3.9 |
| 39 | 175.5 | 89 | 400.5 | 39 | 1.7 | 89 | 4.0 |
| 40 | 180.0 | 90 | 405.0 | 40 | 1.8 | 90 | 4.0 |
| 41 | I 84.5 | 91 | 409.5 | 41 | 1.8 | 91 | 4.1 |
| 42 | 189.0 | 92 | 414.0 | 42 | 1.9 | 92 | 4.I |
| 43 | 193.5 | 93 | 418.5 | 43 | I. 9 | 93 | 4.2 |
| 44 | 198.0 | 94 | 423.0 | 44 | 2.0 | 94 | 4.2 |
| 45 | 202. 5 | 95 | 427.5 | 45 | 2.0 | 95 | $4 \cdot 3$ |
| . 16 | 20'7.0 | 96 | 432.0 | 46 | 2.1 | 96 | $4 \cdot 3$ |
| 47 | 211. 5 | 97 | 436.5 | 47 | 2.1 | 97 | $4 \cdot 3$ |
| 48 | 216.0 | 98 | 441.0 | 48 | 2.1 | 98 | 4.4 |
| 49 | 220.5 | 99 | 445.5 | 49 | 2.2 | 99 | 4.4 |
| 50 | 225.0 | 100 | 450.0 | 50 | 2.2 | 100 | 4.5 |

4.6 PER CENT. TEST.

| Milk. | FAT. | MILK. | FAT. | milk. | FAT. | milk. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 4.6 | 51 | 234.6 | I |  | 51 | 2.3 |
| 2 | 9.2 | 52 | 239.2 | 2 | . | 52 | 2.4 |
| 3 | 13.8 | 53 | 243.8 | 3 | . | 53 | 2.4 |
| 4 | 18.4 | 54 | 248.4 | 4 | . 2 | 54 | 2.5 |
| 5 | 23.0 | 55 | 253.0 | 5 | . 2 | 55 | 2.5 |
| 6 | 27.6 | 56 | 257.6 | 6 | . 3 | 56 | 2.6 |
| 7 | 32.2 | 57 | 262.2 | 7 | . 3 | 57 | 2.6 |
| S | 36.8 | 58 | 266.8 | 8 | . 3 | 58 | 2.6 |
| 9 | 41.4 | 59 | 271.4 | 9 | . 4 | 59 | 2.7 |
| 10 | 46.0 | 60 | 276.0 | 10 | . 4 | 60 | 2.7 |
| 11 | 50.6 | 61 | 280.6 | 11 | . 5 | 61 | 2.8 |
| 12 | 55.2 | 62 | 285.2 | 12 | . 5 | 62 | 2.8 |
| 13 | 59.8 | 63 | 289.8 | 13 | . 6 | 63 | 2.9 |
| 14 | 64.4 | 64 | 294.4 | 14 | . 6 | 64 | 2.9 |
| 15 | 69.0 | 65 | 299.0 | 15 | . 7 | 65 | 3.0 |
| 16 | 73.6 | 66 | 303.6 | 16 | . 7 | 66 | 3.0 |
| 17 | 78.2 | 67 | 308.2 | 17 | . 8 | 67 | 3.1 |
| 18 | 82.8 | 68 | 312.8 | 18 | . 8 | 68 | 3.1 |
| 19 | 87.4 | 69 | 317.4 | 19 | . 9 | 69 | 3.2 |
| 20 | 92.0 | 70 | 322.0 | 20 | . 9 | 70 | 3.2 |
| 21 | 96.6 | 71 | 326.6 | 21 | . 9 | 71 | 3.2 |
| 22 | 101.2 | 72 | 331.2 | 22 | 1.0 | 72 | 3.3 |
| 23 | 105.8 | 73 | 335.8 | 23 | 1.0 | 73 | 3.3 |
| 24 | 110.4 | 74 | 340.4 | 24 | I. 1 | 74 | 3.4 |
| 25 | 115.0 | 75 | 345.0 | 25 | I. 1 | 75 | 3.4 |
| 26 | I 19.6 | 76 | 349.6 | 26 | 1.2 | 76 | 3.5 |
| 27 | 124.2 | 77 | 354.2 | 27 | 1.2 | 77 | 3.5 |
| 28 | 128.8 | 78 | 358.8 | 28 | 1.3 | 78 | 3.6 |
| 29 | 133.4 | 79 | 363.4 | 29 | 1.3 | 79 | 3.6 |
| 30 | 138.0 | 80 | 368.0 | 30 | 1.4 | 80 | 3.7 |
| 31 | 142.6 | 8 I | 372.6 | 31 | 1.4 | 81 | 3.7 |
| 32 | 147.2 | 82 | 377.2 | 32 | I. 5 | 82 | 3.8 |
| 33 | 151.8 | 83 | 3 SI .8 | 33 | 1.5 | 83 | 3.8 |
| 34 | 156.4 | 84 | 386.4 | 34 | 1.5 | 84 | 3.8 |
| 35 | 161.0 | 85 | 391.0 | 35 | 1. 6 | 85 | 3.9 |
| 36 | 165.6 | 86 | 395.6 | 36 | 1. 6 | 86 | 3.9 |
| 37 | 170.2 | 87 | 400.2 | 37 | 1.7 | 87 | 4.0 |
| 38 | 174.8 | 88 | 404.8 | 38 | 1.7 | 88 | 4.0 |
| 39 | 179.4 | 89 | 409.4 | 39 | I. 8 | 89 | 4.1 |
| 40 | 184.0 | 90 | 414.0 | 40 | 1.8 | 90 | 4.1 |
| 41 | : 58.6 | 91 | 418.6 | 41 | 1.9 | 91 | 4.2 |
| 42 | 193.2 | 92 | 423.2 | 42 | 1.9 | 92 | 4.2 |
| 43 | 197.8 | 93 | 427.8 | 43 | 2.0 | 93 | 4.3 |
| 44 | 202.4 | 94 | 432.4 | 44 | 2.0 | 94 | 4.3 |
| 45 | 207.0 | 95 | 437.0 | 45 | 2.1 | 95 | 4.4 |
| 46 | 211.6 | 96 | 441.6 | 46 | 2.1 | 96 | 4.4 |
| 47 | 216.2 | 97 | 446.2 | 47 | 2.1 | 97 | 4.4 |
| 48 | 220.8 | 98 | 450.8 | 48 | 2.2 | 98 | 4.5 |
| 49 | 225.4 | 99 | 455.4 | 49 | 2.2 | 99 | 4.5 |
| 50 | 230.0 | 100 | 460.0 | 50 | 2.3 | 100 | 4.6 |

4.7 PER CENT. TEST.

| MILK. | FAT. | MILK. | Fat. | MILK. | FAT. | MILK. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 4.7 | 51 | 239.7 | I |  | 51 | 2.4 |
| 2 | 9.4 | 52 | 244.4 | 2 | . 1 | 52 | 2.4 |
| 3 | 14.1 | 53 | 249.1 | 3 | . 1 | 53 | 2.5 |
| 4 | 18.8 | 54 | 253.8 | 4 | . 2 | 54 | 2.5 |
| 5 | 23.5 | 55 | 258.5 | 5 | . 2 | 55 | 2.6 |
| 6 | 28.2 | 56 | 263.2 | 6 | . 3 | 56 | . 6 |
| 7 | 32.9 | 57 | 267.9 | 7 | - 3 | 57 | 2.7 |
| 8 | 37.6 | 58 | 272.6 | 8 | . 4 | 58 | 2.7 |
| 9 | 42.3 | 59 | 277.3 | 9 | . 4 | 59 | 2.8 |
| 10 | 47.0 | 60 | 282.0 | 10 | . 5 | 60 | 2.8 |
| I I | 51.7 | 61 | 286.7 | II | . 5 | 61 | 2.8 |
| 12 | 56.4 | 62 | 291.4 | 12 | . 5 | 62 | 2.9 |
| 13 | 61.1 | 63 | 296.1 | 13 | . 6 | 63 | 2.9 |
| 14 | 65.8 | 64 | 300.8 | - 14 | . 6 | 64 | 3.0 |
| 15 | 70.5 | 65 | 305.5 | - 15 | . 7 | 65 | 3.0 |
| 16 | 75.2 | 66 | 310.2 | 16 | . 7 | 66 | 3.1 |
| 17 | 79.9 | 67 | 314.9 | 17 |  | 68 | 3.1 |
| 18 | 84.6 | 68 | 319.6 | 18 | . 8 | 68 | 3.2 |
| 19 | 89.3 | 69 | 324.3 | 19 | . 9 | 69 | 3.2 |
| 20 | 94.0 | 70 | 329.0 | 20 | . 9 | 70 | 3.3 |
| 21 | 98.7 | 71 | 333.7 | 21 | 1.0 | 71 | 3.3 |
| 22 | 103.4 | 72 | 338.4 | 22 | 1.0 | 72 | 3.4 |
| 23 | 108.1 | 73 | 343.1 | 23 | 1.1 | 73 | 3.4 |
| 24 | 112.8 | 74 | 347.8 | 24 | I. 1 | 74 | 3.5 3.5 |
| 25 | 117.5 | 75 | 352.5 | 25 | I. 2 | 75 | 3.5 3.6 |
| 26 | 122.2 | 76 | 357.2 | 26 | 1.2 | 76 | 3.6 |
| 27 | 126.9 | 77 | 361.9 | 27 | 1.2 1.3 | 78 | 3.6 |
| 28 | 131.6 | 78 | 366.6 | 28 | 1.3 I. 3 |  | 3.6 |
| 29 | 136.3 | 79 | 371.3 376.0 | 29 | 1.3 1.4 | 79 80 | 3.7 |
| 30 | 141.0 | 80 | 376.0 380.7 | 31 | 1.4 | 81 | 3.8 |
| 31 | 145.7 150.4 | 81 82 | 380.7 385.4 | 32 | I. 5 | 82 | 3.8 |
| 32 33 | 150.4 155.1 | 83 | 390.1 | 33 | 1.5 | 83 | 3.9 |
| 33 | 155.1 159.8 | 84 | 394.8 | 34 | 1.6 | 84 | 3.9 |
| 34 35 | 164.5 | 85 | 399.5 | 35 | 1.6 | 85 | 4.0 |
| 36 | 169.2 | 86 | 404.2 | 36 | 1.7 | 86 | 4.0 |
| 37 | 173.9 | 87 | 408.9 | 37 | 1.7 | 87 | 4.1 |
| 38 | 178.6 | 88 | 413.6 | 38 | 1.8 | 88 | 4.1 |
| 39 | 183.3 | 89 | 418.3 | 39 | 1.8 | 89 | 4.2 |
| 40 | 188.0 | 90 | 423.0 | 40 | 1.9 | 90 | 4.2 |
| 41. | 192.7 | 91 | 427.7 | 41 | 1.9 | 91 | 4.3 |
| 42 | 197.4 | 92 | 432.4 | 42 | 2.0 | 92 | 4.3 |
| 43 | 202.1 | 93 | 437.1 | 43 | 2.0 | 93 | 4.4 |
| 44 | 206.8 | 94 | 441.8 | 44 | 2.0 | 94 | 4.4 |
|  | 211.5 | 95 | 446.5 | 45 | 2.1 | 95 | 4.4 |
| 46 | 216.2 | 96 | 451.2 | 46 | 2.1 | 96 | 4.5 |
| 47 | 220.9 | 97 | 455.9 | 47 | 2.2 | 97 | 4.5 |
| 48 | 225.6 | 98 | 460.6 | 48 | 2.2 | 98 | 4.6 |
| 49 | 230.3 | 99 | 465.3 | 49 | 2.3 | 99 | 4.6 |
| 50 | 235.0 | 100 | 470.0 | 50 | 2.3 | 100 | 4.7 |


| MILK. | fat. | milk. | FAT. | milk. | FAT. | milk. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | 4.8 | 51 | 244.8 | 1 |  | 5 I | 2.4 |
| 2 | 9.6 | 52 | 249.6 | 2 | . 1 | 52 | 2.5 |
| 3 | 14.4 | 53 | 254.4 | 3 | 1 | 53 | 2.5 |
| 4 | 19.2 | 54 | 259.2 | 4 | . 2 | 54 | 2.6 |
| 5 | 24.0 | 55 | 264.0 | 5 | . 2 | 55 | 2.6 |
| 6 | 28.8 | 56 | 268.8 | 6 | -3 | 56 | 2.7 |
| 7 | 33.6 | 57 | 273.6 | 7 | . 3 | 57 | 2.7 |
| 8 | 38.4 | 58 | 278.4 | 8 | . 4 | 58 | 2.8 |
| 9 | 43.2 | 59 | 283.2 | 9 | . 4 | 59 | 2.8 |
| 10 | 48.0 | 60 | 288.0 | 10 | . 5 | 60 | 2.9 |
| 11 | 52.8 | 61 | 292.8 | 11 | . 5 | 61 | 2.9 |
| 12 | 57.6 | 62 | 297.6 | 12 | . 6 | 62 | 3.0 |
| 13 | 62.4 | 63 | 302.4 | 13 | . 6 | 63 | 3.0 |
| 14 | 67.2 | 64 | 307.2 | 14 | . 7 | 64 | 3.1 |
| 15 | 72.0 | 65 | 312.0 | 15 | .7 | 65 | 3.1 |
| 16 | 76.8 | 66 | 316.8 | 16 | . 7 | 66 | 3.1 |
| 17 | 8 I .6 | 67 | 321.6 | 17 | . 8 | 67 | 3.2 |
| 18 | 86.4 | 68 | 326.4 | 18 | . 8 | 68 | 3.2 |
| 19 | 91.2 | 69 | 331.2 | 19 | . 9 | 69 | $3 \cdot 3$ |
| 20 | 96.0 | 70 | 336.0 | 20 | . 9 | 70 | 3.3 |
| 21 | 100.8 | 71 | 340.8 | 21 | 1.0 | 71 | 3.4 |
| 22 | 105.6 | 72 | 345.6 | 22 | 1.0 | 72 | 3.4 |
| 23 | 110.4 | 73 | 350.4 | 23 | 1.1 | 73 | 3.5 |
| 24 | 115.2 | 74 | 355.2 | 24 | 1.1 | 74 | $3 \cdot 5$ |
| 25 | 120.0 | 75 | 360.0 | 25 | 1.2 | 75 | 3.6 |
| 26 | 124.8 | 76 | 364.8 | 26 | 1.2 | 76 | 3.6 |
| 27 | 129.6 | 77 | 369.6 | 27 | I. 3 | 77 | 3.7 |
| 28 | 134.4 | 78 | 374.4 | 28 | 1.3 | 78 | 3.7 |
| 29 | 139.2 | 79 | 379.2 | 29 | 1.4 | 79 | 3.8 |
| 30 | 144.0 | 80 | 384.0 | 30 | 1.4 | 80 | 3.8 |
| 31 | 148.8 | 81 | 388.8 | 31 | 1.5 | 81 | 3.9 |
| 32 | 153.6 | 82 | 393.6 | 32 | 1.5 | 82 | 3.9 |
| 33 | 158.4 | 83 | 398.4 | 33 | 1.6 | 83 | 4.0 |
| 34 | 163.2 | 84 | 403.2 | 34 | 1.6 | 84 | 4.0 |
| 35 | 168.0 | 85 | 408.0 | 35 | 1.7 | 85 | 4.1 |
| 36 | 172.8 | 86 | 412.8 | 36 | 1.7 | 86 | 4.1 |
| 37 | 177.6 | 87 | 417.6 | 37 | 1.8 | 87 | 4.2 |
| 38 | 182.4 | 88 | 422.4 | 38 | 1.8 | 88 | 4.2 |
| 39 | 187.2 | 89 | 427.2 | 39 | 1.9 | 89 | 4.3 |
| 40 | 192.0 | 90 | 432.0 | 40 | 1.9 | 90 | 4.3 |
| 41 | 196.8 | 91 | 436.8 | 41 | 1.9 | 91 | 4.3 |
| 42 | 201.6 | 92 | 441.6 | 42 | 2.0 | 92 | 4.4 |
| 43 | 206.4 | 93 | 446.4 | 43 | 2.0 | 93 | 4.4 |
| 44 | 211.2 | 94 | 451.2 | 44 | 2.1 | 94 | 4.5 |
| 45 | 216.0 | 95 | 456.0 | 45 | 2.1 | 95 | 4.5 |
| 46 | 220.8 | 96 | 460.8 | 46 | 2.2 | 96 | 4.6 |
| 47 | 225.6 | 97 | 465.6 | 47 | 2.2 | 97 | 4.6 |
| 48 | 230.4 | 98 | 470.4 | 48 | 2.3 | 98 | 4.7 |
| 49 | 235.2 | 99 | 475.2 | 49 | 2.3 | 99 | 4.7 |
| 50 | 240.0 | 100 | 480.0 | 50 | 2.4 | 100 | 4.8 |

4.9 PER CENT. TEST.

| MILK. | FAT. | MILK. | FAT. | MILK. | FAT. | MILK. | Fat. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 4.9 | 51 | 249.9 | I |  | 51 | 2.5 |
| 2 | 9.8 | 52 | 254.8 | 2 | . 1 | 52 | 2.5 |
| 3 | 14.7 | 53 | 259.7 | 3 | . 1 | 53 | 2.6 |
| 4 | 19.6 | 54 | 264.6 | 4 | . 2 | 54 | 2.6 |
| 5 | 24.5 | 55 | 269.5 | 5 | . 2 | 55 | 2.7 |
| 6 | 29.4 | 56 | 274.4 | 6 | . 3 | 56 | 2.7 |
| 7 | 34.3 | 57 | 279.3 | 7 | . 3 | 57 | 2.8 |
| 8 | 39.2 | 58 | 284.2 | 8 | . 4 | 58 | 2.8 |
| 9 | 44.1 | 59 | 289.1 | 9 | . 4 | 59 | 2.9 |
| 10 | 49.0 | 60 | 294.0 | 10 | . 5 | 60 | 2.9 |
| 11 | 53.9 | 61 | 298.9 | 11 | . 5 | 61 | 3.0 |
| 12 | 58.8 | 62 | 303.8 | 12 | . 6 | 62 | 3.0 |
| 13 | 63.7 | 63 | 308.7 | 13 | . 6 | 63 | 3.1 |
| 14 | 68.6 | 64 | 313.6 | 14 | . 7 | 64 | 3.1 |
| 15 | 73.5 | 65 | 318.5 | 15 | . 7 | 65 | 3.2 |
| 16 | 78.4 | 66 | 323.4 | 16 | . 8 | 66 | 3.2 |
| 17 | 83.3 | 67 | 328.3 | 17 | . 8 | 67 | 3.3 |
| 18 | 88.2 | 68 | 333.2 | 18 | . 9 | 68 | 3.3 |
| 19 | 93.1 | 69 | 338.1 | 19 | . 9 | 69 | 3.4 |
| 20 | 98.0 | 70 | 343.0 | 20 | 1.0 | 70 | 3.4 |
| 21 | 102.9 | 71 | 347.9 | 21 | 1.0 | 71 | 3.5 |
| 22 | 107.8 | 72 | 352.8 | 22 | I. 1 | 72 | 3.5 |
| 23 | 112.7 | 73 | 357.7 | 23 | I. I | 73 | 3.6 |
| 24 | 117.6 | 74 | 362.6 | 24 | 1.2 | 74 | 3.6 |
| 25 | 122.5 | 75 | 367.5 | 25 | I. 2 | 75 | 3.7 |
| 26 | 127.4 | 76 | 372.4 | 26 | 1.3 | 76 | 3.7 |
| 27 | 132.3 | 77 | 377.3 | 27 | 1.3 | 77 | 3.8 |
| 28 | 137.2 | 78 | 382.2 | 28 | 1.4 | 78 | 3.8 |
| 29 | 142.1 | 79 | 387.1 | 29 | 1.4 | 79 | 3.9 |
| 30 | 147.0 | 80 | 392.0 | 30 | 1.5 | 80 | 3.8 |
| 31 | 151.9 | 8 I | 396.9 | 3 I | 1.5 | 8 I | 3.9 |
| 32 | 156.8 | 82 | 401.8 | 32 | 1.5 | 82 | 4.0 |
| 33 | 161.7 | 83 | 406.7 | 33 | I. 6 | 83 | 4.0 |
| 34 | 166.6 | 84 | 411.6 | 34 | 1. 6 | 84 | 4.1 |
| 35 | 171.5 | 85 | 416.5 | 35 | 1.7 | 85 | 4.1 |
| 36 | 176.4 | 86 | 421.4 | 36 | 1.7 | 86 | 4.2 |
| 37 | 181.3 | 87 | 426.3 | 37 | 1.8 | 87 | 4.2 |
| 38 | 186.2 | 88 | 431.2 | 38 | 1.8 | 88 | 4.3 |
| 39 | 191. 1 | 89 | 436.1 | 39 | 1.9 | 89 | 4.3 |
| 40 | 196.0 | 90 | 441.0 | 40 | 1.9 | 90 | 4.4 |
| 41 | 200.9 | 91 | 445.9 | 41 | 2.0 | 91 | 4.4 |
| 42 | 205.8 | 92 | 450.8 | 42 | 2.0 | 92 | 4.5 |
| 43 | 210.7 | 93 | 455.7 | 43 | 2.1 | 93 | 4.5 |
| 44 | 215.6 | 94 | 460.6 | 44 | 2.1 | 94 | 4.6 |
| 45 | 220.5 | 95 | 465.5 | 45 | 2.2 | 95 | 4.6 |
| 46 | 225.4 | 96 | 47 V .4 | 46 | 2.2 | 96 | 4.7 |
| 47 | 230.3 | 97 | 475.3 | 47 | 2.3 | 97 | 4.7 |
| 48 | 235.2 | 98 | 480.2 | 48 | 2.3 | 98 | 4.8 |
| 49 | 240.1 | 99 | 485.1 | 49 | 2.4 | 99 | 4.8 |
| 50 | 245.0 | 100 | 490.0 | 50 | 2.4 | 100 | 4.9 |


| MILK. | FAT. | milk. | Fat. | milk. | FAT. | MILK. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 5.0 | 51 | 255.0 | 1 |  | 51 | 2.5 |
| 2 | 10.0 | 52 | 260.0 | 2 | . 1 | 52 | 2.6 |
| 3 | 15.0 | 53 | 265.0 | 3 | . 1 | 53 | 2.6 |
| 4 | 20.0 | 54 | 270.0 | 4 | . 2 | 54 | 2.7 |
| 5 | 25.0 | 55 | 275.0 | 5 | . 2 | 55 | 2.7 |
| 6 | 30.0 | 56 | 280.0 | 6 | . 3 | 56 | 2.8 |
| 7 | 35.0 | 57 | 255.0 | 7 | . 3 | 57 | 2.8 |
| 8 | 40.0 | 58 | 290.0 | 8 | . 4 | 58 | 2.9 |
| 9 | 45.0 | 59 | 295.0 | 9 | . 4 | 59 | 2.9 |
| 10 | 50.0 | 60 | 300.0 | 10 | . 5 | 60 | 3.0 |
| 11 | 55.0 | 61 | 305.0 | 11 | . 5 | 61 | 3.0 |
| 12 | 60.0 | 62 | 310.0 | 12 | . 5 | 62 | 3.1 |
| 13 | 65.0 | 63 | 315.0 | 13 | . 6 | 63 | 3.1 |
| 14 | 70.0 | 64 | 320.0 | 14 | . 7 | 64 | 3.2 |
| 15 | 75.0 | 65 | 325.0 | 15 | . 7 | 65 | 3.2 |
| 16 | 80.0 | 66 | 330.0 | 16 | . 8 | 66 | 3.3 |
| 17 | 85.0 | 67 | 335.0 | 17 | . 8 | 67 | 3.3 |
| 18 | 90.0 | 68 | 340.0 | 18 | . 9 | 68 | 3.4 |
| 19 | 95.0 | 69 | 345.0 | 19 | . 9 | 69 | 3.4 |
| 20 | 100.0 | 70 | 350.0 | 20 | 1.0 | 70 | 3.5 |
| 21 | 105.0 | 71 | 355.0 | 21 | 1.0 | 7 I | 3.5 |
| 22 | 110.0 | 72 | 360.0 | 22 | 1.1 | 72 | . 3.6 |
| 23 | I 15.0 | 73 | 355.0 | 23 | 1.1 | 73 | 3.6 |
| 24 | 120.0 | 74 | 370.0 | 24 | 1.2 | 74 | 3.7 |
| 25 | 125.0 | 75 | 375.0 | 25. | 1.2 | 75 | 3.7 |
| 26 | 130.0 | 76 | 380.0 | 26 | 1.3 | 76 | 3.8 |
| 27 | 135.0 | 77 | 385.0 | 27 | 1.3 | 77 | 3.8 |
| 28 | 140.0 | 78 | 390.0 | 28 | 1.4 | 78 | 3.9 |
| 29 | 145.0 | 79 | 395.0 | 29 | 1. 4 | 79 | 3.9 |
| 30 | 150.0 | 80 | 400.0 | 30 | . 1.5 | 80 | 4.0 |
| 31 | 155.0 | 81 | 405.0 | 3 I | 1.5 | 81 | 4.0 |
| 32 | 160.0 | 82 | 410.0 | 32 | I. 6 | 82 | 4.1 |
| 33 | 165.0 | 83 | 415.0 | 33 | 1.6 | 83 | 4. 1 |
| 34 | 170.0 | 84 | 420.0 | 34 | r. 7 | 84 | 4.2 |
| 35 | 175.0 | 85 | 425.0 | 35 | 1.7 | 85 | 4.2 |
| 36 | I 80.0 | 86 | 430.0 | 36 | 1.8 | 86 | 4.3 |
| 37 | 185.0 | 87 | 435.0 | 37 | 1.8 | 87 | 4.3 |
| 38 | 100.0 | 88 | 440.0 | 38 | 1.9 | 88 | 4.4 |
| 39 | 195.0 | 89 | 445.0 | 39 | 1.9 | 89 | 4.4 |
| 40 | 200.0 | 90 | 450.0 | 40 | 2.0 | 90 | 4.5 |
| 4 I | 205.0 | 91 | 455.0 | 4 I | 2.0 | 91 | 4.5 |
| 42 | 210.0 | 92 | 460.0 | 42 | 2.1 | 92 | 4.6 |
| 43 | 215.0 | 93 | 465.0 | 43 | 2.1 | 93 | 4.6 |
| 44 | 220.0 | 94 | 470.0 | 44 | 2.2 | 94 | 4.7 |
| 45 | 225.0 | 95 | 475.0 | 45 | 2.2 | 95 | 4.7 |
| 46 | 230.0 | 96 | 480.0 | 46 | 2.3 | 96 | 4.8 |
| 47 | 235.0 | 97 | 485.0 | 47 | 2.3 | 97 | 4.8 |
| 48 | 240.0 | 98 | 490.0 | 48 | 2.4 | 98 | 4.9 |
| 49 | 245.0 | 99 | 495.0 | 49 | 2.4 | 99 | 4.9 |
| 50 | 250.0 | 100 | 500.0 | 50 | 2.5 | 100 | 5.0 |

5.1 PER CENT. TEST.

| MILK. | FAT. | MILK. | FAT. | milk. | FAT. | milk. | Fat. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 5.1 | 51 | 260.1 | 1 |  | 51 | 2.6 |
| 2 | 10.2 | 52 | 265.2 | 2 | . 1 | 52 | 2.6 |
| 3 | 15.3 | 53 | 270.3 | 3 | . 1 | 53 | 2.7 |
| 4 | 20.4 | 54 | 275.4 | 4 | . 2 | 54 | 2.7 |
| 5 | 25.5 | 55 | 280.5 | 5 | . 2 | 55 | 2.8 |
| 6 | 30.6 | 56 | 285.6 | 6 | . 3 | 56 | 2.8 |
| 7 | $35 \cdot 7$ | 57 | 290.7 | 7 | . 3 | 57 | 2.9 |
| 8 | 40.8 | 58 | 295.8 | 8 | . 4 | 58 | 2.9 |
| 9 | 45.9 | 59 | 300.9 | 9 | . 4 | 59 | 3.0 |
| 10 | 51.0 | 60 | 306.0 | 10 | . 5 | 60 | 3.0 |
| 11 | 56.1 | 61 | 311.1 | 1 I | . 5 | 61 | 3.1 |
| 12 | 61.2 | 62 | 316.2 | 12 | . 6 | 62 | 3.1 |
| 13 | 66.3 | 63 | 321.3 | 13 | . 6 | 63 | 3.2 |
| 14 | 71.4 | 64 | 326.4 | 14 | . 7 | 64 | 3.2 |
| 15 | 76.5 | 65 | 331.5 | 15 | . 7 | 65 | 3.3 |
| 16 | 81.6 | 66 | 336.6 | 16 | . 8 | 66 | 3.3 |
| 17 | 86.7 | 67 | 341.7 | 17 | . 8 | 67 | 3.4 |
| 18 | 91.8 | 68 | 346.8 | 18 | . 9 | 68 | 3.4 |
| 19 | 96.9 | 69 | 351.9 | 19 | . 9 | 69 | 3.5 |
| 20 | 102.0 | 70 | 357.0 | 20 | 1.0 | 70 | 3.6 |
| 21 | 107.1 | 71 | 362.1 | 21 | 1.1 | 71 | 3.6 |
| 22 | 112.2 | 72 | 367.2 | 22 | 1.1 | 72 | 3.7 |
| 23 | 117.3 | 73 | 372.3 | 23 | 1.2 | 73. | 3.7 |
| 24 | 122.4 | 74 | 377.4 | 24 | 1.2 | 74 | 3.8 |
| 25 | 127.5 | 75 | 382.5 | 25 | 1.3 | 75 | 3.8 |
| 26 | 132.6 | 76 | 387.6 | 26 | 1.3 | 76 | 3.9 |
| 27 | 137.7 | 77 | 392.7 | 27 | I. 4 | 77 | 3.9 |
| 28 | 142.8 | 78 | 397.8 | 28 | 1.4 | 78 | 4.0 |
| 29 | 147.9 | 79 | 402.9 | 29 | 1.5 | 79 | 4.0 |
| 30 | 153.0 | 80 | 408.0 | 30 | 1.5 | 80 | 4.1 |
| 31 | 158.1 | 8 I | 413.1 | 31 | 1.6 | 81 | 4.1 |
| 32 | 163.2 | 82 | 418.2 | 32 | 1.6 | 82 | 4.2 |
| 33 | 168.3 | 83 | 423.3 | 33 | 1.7 | 83 | 4.2 |
| 34 | 173.4 | 84 | 428.4 | 34 | 1.7 | 84 | 4.3 |
| 35 | 178.5 | 85 | 433.5 | 35 | 1.8 | 85 | 4.3 |
| 36 | 183.6 | 86 | 438.6 | 36 | 1.8 | 86 | 4.4 |
| 37 | 188.7 | 87 | 443.7 | 37 | I. 9 | 87 | 4.4 |
| 38 | 193.8 | 88 | 488.8 | 38 | 1.9 | 88 | 4.5 |
| 39 | 198.9 | 89 | 453.9 | 39 | 2.0 | 89 | 4.5 |
| 40 | 204.0 | 90 | 459.0 | 40 | 2.0 | 90 | 4.6 |
| 41 | 209. 1 | 91 | 464.1 | 41 | 2.1 | 91 | 4.6 |
| 42 | 214.2 | 92 | 469.2 | 42 | 2.1 | 92 | 4.7 |
| 43 | 219.3 | 93 | 474.3 | 43 | 2.2 | 93 | 4.7 |
| 44 | 224.4 | 94 | 479.4 | 44 | 2.2 | 94 | 4.8 |
| 45 | 229.5 | 95 | 484.5 | 45 | 2.3 | 95 | 4.8 |
| 46 | 234.6 | 96 | 489.6 | 46 | 2.3 | 96 | 4.9 |
| 47 | 239.7 | 97 | 494.7 | 47 | 2.4 | 97 | 4.9 |
| 48 | 244.8 | 98 | 499.8 | 48 | 2.4 | 98 | 5.0 |
| 49 | 249.9 | 99 | 504.9 | 49 | 2.5 | 99 | 5.0 |
| 50 | 255.0 | 100 | 510.0 | 50 | 2.5 | 100 | 5.1 |


| MILK. | fat. | Milk. | FAT. | milk. | FAT. | milk. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 5.2 | 51 | 265.2 | I |  | 51 | 2.6 |
| 2 | 10.4 | 52 | 270.4 | 2 | . 1 | 52 | 2.7 |
| 3 | 15.6 | 53 | 275.6 | 3 | I | 53 | 2.7 |
| 4 | 20.8 | 54 | 280.8 | 4 | 2 | 54 | 2.8 |
| 5 | 26.0 | 55 | 286.0 | 5 | . 2 | 55 | 2.8 |
| 6 | 31.2 | 56 | 291.2 | 6 | . 3 | 56 | 2.9 |
| 7 | 36.4 | 57 | 296.4 | 7 | . 3 | 57 | 2.9 |
| 8 | 41.6 | 58 | 301.6 | 8 | . 4 | 58 | 3.0 |
| 9 | 46.8 | 59 | 306.8 | 9 | . 4 | 59 | 3.0 |
| 10 | 52.0 | 60 | 312.0 | 10 | . 5 | 60 | 3.1 |
| 11 | 57.2 | 61 | 317.2 | 11 | . 6 | 61 | 3.2 |
| 12 | 62.4 | 62 | 322.4 | 12 | . 6 | 62 | 3.2 |
| 13 | 67.6 | 63 | 327.6 | 13 | . 7 | 63 | $3 \cdot 3$ |
| 14 | 72.8 | 64 | 332.8 | 14 | . 7 | 64 | $3 \cdot 3$ |
| 15 | 78.0 | 65 | 338.0 | 15 | . 8 | 65 | 3.4 |
| 16 | 83.2 | 66 | 343.2 | 16 | . 8 | 66 | 3.4 |
| 17 | 88.4 | 67. | 348.4 | 17 | . 9 | 67 | $3 \cdot 5$ |
| 18 | 93.6 | 68 | 353.6 | 18 | . 9 | 58 | 3.5 |
| 19 | 98.8 | 69 | 358.8 | 19 | 1.0 | 69 | 3.6 |
| 20 | 104.0 | 70 | 364.0 | 20 | 1.0 | 70 | 3.6 |
| 21 | 109.2 | 71 | 369.2 | 21 | 1.1 | 71 | 3.7 |
| 22 | 114.4 | 72 | 374.4 | 22 | I. 1 | 72 | 3.7 |
| 23 | 119.6 | 73 | 379.6 | 23 | I. 2 | 73 | 3.8 |
| 24 | 124.8 | 74 | 384.8 | 24 | 1.2 | 74 | 3.8 |
| 25 | 130.0 | 75 | 390.0 | 25 | I. 3 | 75 | 3.9 |
| 26 | 135.2 | 76 | 395.2 | 26 | I. 3 | 76 | 3.9 |
| 27 | 140.4 | 77 | 400.4 | 27 | I. 4 | 77 | 4.0 |
| 28 | 145.6 | 78 | 405.6 | 28 | 1.4 | 78 | 4.0 |
| 29 | 150.8 | 79 | 410.8 | 29 | 1.5 | 79 | 4.1 |
| 30 | 156.0 | 80 | 416.0 | 30 | 1.5 | 80 | 4.1 |
| 31 | 161.2 | 8 I | 42 I .2 | 31 | I. 6 | 81 | 4.2 |
| 32 | 166.4 | 82 | 425.4 | 32 | I. 6 | 82 | 4.2 |
| 33 | 171.6 | 83 | 431.6 | 33 | 1.7 | 83 | 4.3 |
| 34 | 176.8 | 84 | 436.8 | 34 | 1.7 | 84 | 4.3 |
| 35 | 182.0 | 85 | 442.0 | 35 | 1.8 | 85 | 4.4 |
| 36 | 187.2 | 86 | 447.2 | 36 | 1.9 | 86 | 4.5 |
| 37 | 192.4 | 87 | 452.4 | 37 | 1.9 | 87 | 4.5 |
| 38 | 197.6 | 88 | 457.6 | 38 | 2.0 | 88 | 4.6 |
| 39 | 202.8 | 89 | 462.8 | 39 | 2.0 | 89 | 4.6 |
| 40 | 208.0 | 90 | 468.0 | 40 | 2.1 | 90 | 4.7 |
| 4 I | 213.2 | 91 | 473.2 | 41 | 2.1 | 91 | 4.7 |
| 42 | 218.4 | 92 | 479.4 | 42 | 2.2 | 92 | 4.8 |
| 43 | 223.6 | 93 | 483.6 | 43 | 2.2 | 93 | 4.8 |
| 44 | 228.8 | 94 | 488.8 | 44 | 2.3 | 94 | 4.9 |
| 45 | 234.0 | 95 | 494.0 | 45 | 2.3 | 95 | 4.9 |
| 46 | 239.2 | 96 | 499.2 | 46 | 2.4 | 96 | 5.0 |
| 47 | 244.4 | 97 | 504.4 | 47 | 2.4 | 97 | 5.0 |
| 48 | 249.6 | 98 | 509.6 | 48 | 2.5 | 98 | 5.1 |
| 49 | 254.8 | 99 | 514.8 | 49 | 2.5 | 99 | 5.1 |
| 50 | 260.0 | 100 | 520.0 | 50 | 2.6 | 100 | 5.2 |

5.3 PER CENT. TEST.

| MILK. | FAT. | MILK. | FAT. | MILK. | FAT. | milk. | fat. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $5 \cdot 3$ | 51 | 270.3 | 1 |  | 51 | 2.7 |
| 2 | 10.6 | 52 | 275.6 | 2 | . 1 | 52 | 2.7 |
| 3 | 15.9 | 53 | 280.9 | 3 | . 1 | 53 | 2.8 |
| 4 | 21.2 | 54 | 286.2 | 4 | 2 | 54 | 2.8 |
| 5 | 26.5 | 55 | 291.5 | 5 | . 2 | 55 | 2.9 |
| 6 | 31.8 | 56 | 296.8 | 6 | . 3 | 56 | 2.9 |
| 7 | 37. 1 | 57 | 302.1 | 7 | . 4 | 57 | 3.0 |
| 8 | 42.4 | 58 | 307.4 | 8 | . 4 | 58 | 3.1 |
| 9 | 47.7 | 59 | 312.7 | 9 | . 5 | 59 | 3.1 |
| 10 | 53.0 | 60 | 318.0 | 10 | . 5 | 60 | 3.2 |
| 11 | 58.3 | 61 | 323.3 | 11 | . 6 | 61 | 3.2 |
| 12 | 63.6 | 62 | 328.6 | 12 | . 6 | 62 | 3.3 |
| 13 | 68.90 | 63 | 333.9 | 13 | . 7 | 63 | 3.3 |
| J 4 | 74.2 | 6.4 | 339.2 | 14 | . 7 | 64 | 3.4 |
| 15 | 79.5 | 65 | 344.5 | 15 | . 8 | 65 | 3.4 |
| 16 | 84.8 | 66 | 349.8 | 16 | . 8 | 66 | 3.5 |
| 17 | 90.1 | 67 | 355.1 | 17 | . 9 | 67 | 3.5 |
| 18 | 95.4 | 68 | 360.4 | 18 | . 9 | 68 | 3.6 |
| 19 | 100.7 | 69 | 365.7 | 19 | 1.0 | 69 | 3.6 |
| 20 | 106.0 | 70 | 371.0 | 20 | 1.0 | 70 | 3.7 |
| 21 | 111.3 | 71 | 376.3 | 21 | 1.1 | 71 | 3.7 |
| 22 | I16.6 | 72 | 381.6 | 22 | I. 1 | 72 | 3.8 |
| 23 | 121.9 | 73 | 386.9 | 23 | 1.2 | 73 | 3.8 |
| 24 | 127.2 | 74 | 392.2 | 24 | I. 3 | 74 | 3.9 |
| 25 | 132.5 | 75 | 397.5 | 25 | I. 3 | 75 | 4.0 |
| 26 | 137.8 | 76 | 402.8 | 26 | 1.4 | 76 | 4.0 |
| 27 | 143.1 | 77 | 408. I | 27 | 1.4 | 77 | 4.1 |
| 28 | 148.4 | 78 | 413.4 | 28 | I. 5 | 78 | 4.1 |
| 29 | 153.7 | 79 | 418.7 | 29 | I. 5 | 79 | 4.2 |
| 30 | 159.0 | 80 | 424.0 | 30 | 1.6 | 80 | 4.2 |
| 31 | 164.3 | 81 | 429.3 | 31 | 1.6 | 8 I | 4.3 |
| 32 | 169.6 | 82 | 434.6 | 32 | 1.7 | 82 | 4.3 |
| 33 | 174.9 | 83 | 439.9 | 33 | 1.7 | 83 | 4.4 |
| 34 | 180.2 | 84 | 445.2 | 34 | 1.8 | 8 | 4.4 |
| 35 | 185.5 | 85 | 450.5 | 35 | 1.8 | 85 | 4.5 |
| 36 | 190.8 | 86 | 455.8 | 36 | 1.9 | 86 | 4.5 |
| 37 | 196. I | 87 | 461. I | 37 | 1.9 | 87 | 4.6 |
| 38 | 201.4 | 88 | 466.4 | 38 | 2.0 | 88 | 4.6 |
| 39 | 206.7 | 89 | 471.7 | 39 | 2.0 | 89 | 4.7 |
| 40 | 212.0 | 90 | 477.0 | 40 | 2.1 | 90 | 4.8 |
| 41 | 217.3 | 9 I | 482.3 | 41 | 2.2 | 91 | 4.8 |
| 42 | 222.6 | 92 | 487.6 | 42 | 2.2 | 92 | 4.9 |
| 43 | 227.9 | 93 | 492.9 | 43 | 2.3 | 93 | 4.9 |
| 44 | 233.2 | 94 | 498.2 | 44 | 2.3 | 94 | 5.0 |
| 45 | 238.5 | 95 | 503.5 | 45 | 2.4 | 95 | 5.0 |
| 46 | 243.8 | 96 | 508.8 | 46 | 2.4 | 96 | 5.1 |
| 47 | 249.1 | 97 | 514.1 | 47 | 2.5 | 97 | 5.1 |
| 48 | 254.4 | 98 | 519.4 | 48 | 2.5 | 98 | 5.2 |
| 49 | 259.7 | 99 | 524.7 | 49 | 2.6 | 99 | 5.2 |
| 50 | 265.0 | 100 | 530.0 | 50 | 2.6 | 100 | 5.3 |


| MILK. | FAT. | Milk. | FAT. | MILK. | FAT. | MILK. | FAT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 5.4 | 51 | 275.4 | 1 |  | 51 | 2.7 |
| 2 | 10.8 | 52 | 2 So .8 | 2 | 1 | 52 | 2.8 |
| 3 | 16.2 | 53 | 286.2 | 3 | I | 53 | 2.8 |
| 4 | 21.6 | 54 | 291. 6 | 4 | . 2 | 54 | 2.9 |
| 5 | 27.0 | 55 | 297.0 | 5 | . 3 | 55 | 3.0 |
| 6 | 32.4 | 56 | 302.4 | 6 | . 3 | 56 | 3.0 |
| 7 | 37.8 | 57 | 307.8 | 7 | . 4 | 57 | 3.1 |
| 8 | 43.2 | 58 | 313.2 | 8 | . 4 | 58 | 3.1 |
| 9 | 48.6 | 59 | 318.6 | 9 | . 5 | 59 | 3.2 |
| 10 | 54.0 | 60 | 324.0 | 10 | . 5 | 60 | 3.2 |
| 11 | 59.4 | 61 | 329.4 | 11 | . 6 | 61 | $3 \cdot 3$ |
| 12 | 64.8 | 62 | 334.8 | 12 | . 6 | 62 | 3.3 |
| 13 | 70.2 | 63 | 340.2 | 13 | . 7 | 63 | 3.4 |
| 14 | 75.6 | 64 | 345.6 | 14 | . 7 | 64 | 3.4 |
| 15 | 8 I .0 | 65 | 351.0 | 15 | . 8 | 65 | 3.5 |
| 16 | 86.4 | 66 | 356.4 | 16 | . 8 | 66 | 3.5 |
| 17 | 91.8 | 67 | 361.8 | 17 | . 9 | 67 | 3.6 |
| 18 | 97.2 | 68 | 367.2 | 18 | 1.0 | 68 | 3.7 |
| 19 | 102.6 | 69 | 372.6 | 19 | 1.0 | 69 | 3.7 |
| 20 | 108.0 | 79 | 378.0 | 20 | 1.1 | 70 | 3.8 |
| 21 | 113.4 | 71 | 383.4 | 21 | I. 1 | 71 | 3.8 |
| 22 | 118.5 | 72 | 388.8 | 22 | 1.2 | 72 | 3.9 |
| 23 | 124.2 | 73 | 394.2 | 23 | 1.2 | 73 | 3.9 |
| 24 | 129.6 | 74 | 399.6 | 24 | 1.3 | 74 | 4.0 |
| 25 | 135.0 | 75 | 405.0 | 25 | 1.3 | 75 | 4.0 |
| 26 | 140.4 | 76 | 410.4 | 26 | 1.4 | 76 | 4.1 |
| 27 | 145.8 | 77 | 415.8 | 27 | 1.4 | 77 | 4.1 |
| 28 | 151.2 | 78 | 421.2 | 28 | 1.5 | 78 | 4.2 |
| 29 | 156.6 | 79 | 426.6 | 29 | 1.5 | 79 | 4.2 |
| 30 | 162.0 | 80 | 432.0 | 30 | 1.6 | 80 | 4.3 |
| 31 | 167.4 | 81 | 437.4 | 31 | 1.7 | 81 | 4.4 |
| 32 | 172.8 | 82 | 442.8 | 32 | 1.7 | S2 | 4.4 |
| 33 | 178.2 | 83 | 448.2 | 33 | 1.8 | 83 | 4.5 |
| 34 | 183.6 | 84 | 453.6 | 34 | 1.8 | 84 | 4.5 |
| 35 | 189.0 | 85 | 459.0 | 35 | 1.9 | 85 | 4.6 |
| 36 | 194.4 | S6 | 464.4 | 36 | 1.9 | 86 | 4.6 |
| 37 | 199.8 | 87 | 469.8 | 37 | 2.0 | 87 | 4.7 |
| 38 | 205.2 | 88 | 475.2 | 38 | 2.0 | 88 | 4.7 |
| 39 | 210.6 | 89 | 480.6 | 39 | 2.1 | 89 | 4.8 |
| 40 | 216.0 | 90 | 486.0 | 40 | 2.1 | 90 | 4.8 |
| 4 I | 221.4 | 91 | 491.4 | 41 | 2.2 | 9 I | 4.9 |
| 42 | 226.8 | 92 | $496 . S$ | 42 | 2.2 | 92 | 4.9 |
| 43 | 232.2 | 93 | 502.2 | 43 | 2.3 | 93 | 5.0 |
| 44 | 237.6 | 94 | 507.6 | 44 | 2.4 | 94 | 5.1 |
| 45 | 243.0 | 95 | 513.0 | 45 | 2.4 | 95 | 5.1 |
| 46 | 248.4 | 96 | 518.4 | 46 | 2.5 | 96 | 5.2 |
| 47 | 253.8 | 97 | 523.8 | 47 | 2.5 | 97 | 5.2 |
| 48 | 259.2 | 98 | 529.2 | 4 S | 2.6 | 98 | $5 \cdot 3$ |
| 49 | 264.6 | 99 | 534.6 | 49 | 2.6 | 99 | 5.3 |
| 50 | 270.0 | 100 | 540.0 | 50 | 2.7 | 100 | 5.4 |

5.5 PER CENT. TEST.

| milk. | FAT. | Milk. | FAT. | MILK. | FAT. | MIL.K. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $5 \cdot 5$ | 51 | 280.5 | 1 |  | 51 | 2.8 |
| 2 | II. 0 | 52 | 286.0 | 2 | . 1 | 52 | 2.8 |
| 3 | 16.5 | 53 | 291.5 | 3 | . 1 | 53 | 2.9 |
| 4 | 22.0 | 54 | 297.0 | 4 | . 2 | 54 | 3.0 |
| 5 | 27.5 | 55 | 302.5 | 5 | - 3 | 55 | 3.0 |
| 6 | 33.0 | 56 | 308.0 | 6 | . 3 | 56 | 3.1 |
| 7 | 38.5 | 57 | 313.5 | 7 | . 4 | 57 | 3.1 |
| 8 | 44.0 | 58 | 319.0 | 8 | . 4 | 58 | 3.2 |
| 10 | 49.5 | 59 | 324.5 | 9 | . 5 | 59 | 3.2 |
| 10 | 55.0 | 60 | 330.0 | 10 | . 5 | 60 | 3.3 |
| 11 | 60.5 | 61 | 335.5 | 1 I | . 6 | 61 | 3.3 |
| I3 | 71.5 | 62 | 341.0 | 12 | . 6 | 62 | 3.4 |
| 14 | 77.0 | 64 | 352.0 | 14 | . 8 | 63 | 3.4 |
| 15 | 82.5 | 65 | 357.5 | 15 | . 8 | 65 | 3.5 3.6 |
| 16 | 88.0 | 66 | 363.0 | 16 | . 9 | 66 | .3.6 |
| 17 | 93.5 | 67 | 368.5 | 17 | . 9 | 67 | 3.7 |
| 18 | 99.0 | 68 | 374.0 | 18 | 1.0 | 68 | 3.7 |
| 19 | 104.5 | 69 | 379.5 | 19 | I. 0 | 69 | 3.8 |
| 20 | 110.0 | 70 | 385.0 | 20 | 1.1 | 70 | 3.8 |
| 21 | 115.5 | 71 | 390.5 | 21 | 1.1 | 71 | 3.9 |
| 22 | 121.0 | 72 | 396.0 | 22 | 1.2 | 72 | 3.9 |
| 23 | 126.5 | 73 | 401.5 | 23 | 1.2 | 73 | 4.0 |
| 24 | 132.0 | 74 | 407.0 | 24 | 1.3 | 74 | 4.1 |
| 25 | 137.5 | 75 | 412.5 | 25 | 1.4 | 75 | 4.1 |
| 26 | 143.0 | 76 | 418.0 | 26 | 1.4 | 76 | 4.2 |
| 27 | 148.5 | 77 | 423.5 | 27 | 1.5 | 77 | 4.2 |
| 28 | 154.0 | 78 | 429.0 | 28 | 1.5 | 78 | 4.3 |
| 29 | 159.5 | 79 | 434.5 | 29 | 1.6 | 79 | 4.3 |
| 30 | 165.0 | 80 | 440.0 | 30 | 1.6 | 80 | 4.4 |
| 31 | 170.5 | 81 | 445.5 | 3 I | 1.7 | 81 | 4.4 |
| 32 | 176.0 | 82 | 451.0 | 32 | 1.7 | 82 | 4.5 |
| 33 | 181.5 | 83 | 456.5 | 33 | r. 8 | 83 | 4.5 |
| 34 | 187.0 | 84 | 462.0 | 34 | 1.9 | 8 | 4.6 |
| 35 | 192.5 | 85 | 467.5 | 35 | 1.9 | 85 | 4.7 |
| 36 | 198.0 | 86 | 473.0 | 36 | 2.0 | 86 | 4.7 |
| 37 | 203.5 | 87 | 478.5 | 37 | 2.0 | 87 | 4.8 |
| 38 | 209.0 | 88 | 484.0 | 38 | 2.1 | 88 | 4.8 |
| 39 | 214.5 | 89 | 489.5 | 39 | 2.1 | 89 | 4.9 |
| 40 | 220.0 | 90 | 495.0 | 40 | 2.2 | 90 | 4.9 |
| 41 | 225.5 | 91 | 500.5 | 41 | 2.2 | 91 | 5.0 |
| 42 | 231.0 | 92 | 506.0 | 42 | 2.3 | 92 | 5.0 |
| 43 | 236.5 | 93 | 511.5 | 43 | 2.3 | 93 | 5.1 |
| 44 | 242.0 | 94 | 517.0 | 44 | 2.4 | 94 | 5.2 |
| 45 | 247.5 | 95 | 522.5 | 45 | 2.5 | 95 | 5.2 |
| 46 | 253.0 | 96 | 528.0 | 46 | 2.5 | 96 | 5.3 |
| 47 | 258.5 | 97 | 533.5 | 47 | 2.6 | 97 | 5.3 |
| 48 | 264.0 269.5 | 98 | 539.0 | 48 | 2.6 | 98 | 5.4 |
| 49 50 | 269.5 275.0 | 99 100 | 544.5 550.0 | 49 50 | 2.7 2.7 | 99 100 | 5.4 5.5 |

5.6 PER CENT. TEST.

| MiLk. | FAT. | MILK. | FAT. | MIL. | FAT. | MILK. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | 5.6 | 51 | 285.6 | I |  | 51 | 2.8 |
| 2 | II. 2 | 52 | 291.2 | 2 | . 1 | 52 | 2.9 |
| 3 | 16.8 | 53 | 296.8 | 3 | . | 53 | 2.9 |
| 4 | 22.4 | 54 | 302.4 | 4 | . 2 | 54 | 3.0 |
| 5 | 28.0 | 55 | 308.0 | 5 | . 3 | 55 | 3.1 |
| 6 | 33.6 | 56 | 313.6 | 6 | . 3 | 56 | 3.1 |
| 7 | 39.2 | 57 | 319.2 | 7 | . 4 | 57 | 3.2 |
| 8 | 44.8 | 58 | 324.8 | 8 | . 4 | 58 | 3.2 |
| 9 | 50.4 | 59 | 330.4 | 9 | . 5 | 59 | $3 \cdot 3$ |
| 10 | 56.0 | 60 | 336.0 | 10 | . 5 | 60 | 3.3 |
| 1 I | 6 I .6 | 61 | 341.6 | 1 I | . 6 | 61 | 3.4 |
| 12 | 67.2 | 62 | 347.2 | 12 | . 7 | 62 | 3.5 |
| 13 | 72.8 | 63 | 352.8 | 13 | . 7 | 63 | 3.5 |
| 14 | 78.4 | 64 | 358.4 | 14 | . 8 | 64 | 3.6 |
| 15 | 84.0 | 65 | 364.0 | 15 | . 8 | 65 | 3.6 |
| 16 | 89.6 | 66 | 369.6 | 16 | . 9 | 66 | 3.7 |
| 17 | 95.2 | 67 | 375.2 | 17 | . 9 | 67 | 3.7 |
| 18 | 100.8 | 68 | 380.8 | 18 | 1.0 | 68 | 3.8 |
| 19 | 106.4 | 69 | 386.4 | 19 | I. 0 | 69 | 3.8 |
| 20 | 112.0 | 70 | 392.0 | 20 | 1.1 | 70 | 3.9 |
| 21 | 117.6 | 71 | 397.6 | 21 | 1.2 | 71 | 4.0 |
| 22 | 123.2 | 72 | 403.2 | 22 | 1.2 | 72 | 4.0 |
| 23 | 128.8 | 73 | 408.8 | 23 | 1.3 | 73 | 4.1 |
| 24 | 134.4 | 74 | 414.4 | 24 | 1.3 | 74 | 4.1 |
| 25 | 140.0 | 75 | 420.0 | 25 | I. 4 | 75 | 4.2 |
| 26 | 145.6 | 76 | 425.6 | 26 | I. 4 | 76 | 4.2 |
| 27 | 151.2 | 77 | 43 I .2 | 27 | I. 5 | 77 | 4.3 |
| 28 | 156.8 | 78 | 436.8 | 28 | 1.5 | 78 | 4.3 |
| 29 | 162.4 | 79 | $44^{2} .4$ | 29 | 1.6 | 79 | 4.4 |
| 30 | 168.0 | 80 | 448.0 | 30 | 1.7 | 80 | 4.5 |
| 3 I | 173.6 | 81 | 453.6 | 31 | 1.7 | 81 | 4.5 |
| 32 | 179.2 | 82 | 459.2 | 32 | 1.8 | 82 | 4.6 |
| 33 | I 84.8 | 83 | 464.8 | 33 | 1.8 | 83 | 4.6 |
| 34 | 190.4 | 84 | 470.4 | 34 | 1.9 | 84 | 4.7 |
| 35 | 196.0 | 85 | 476.0 | 35 | 1.9 | 85 | 4.7 |
| 36 | 201.6 | 86 | 485.6 | 36 | 2.0 | 86 | 4.8 |
| 37 | 207.2 | 87 | 487.2 | 37 | 2.1 | 87 | 4.9 |
| 38 | 212.8 | 88 | 492.8 | 38 | 2.1 | 88 | 4.9 |
| 39 | 218.4 | 89 | 498.4 | 39 | 2.2 | 89 | 5.0 |
| 40 | 224.0 | 90 | 504.0 | 40 | 2.2 | 90 | 5.0 |
| 41 | 229.6 | 91 | 509.6 | 4 I | 2.3 | 91 | 5.1 |
| 42 | 235.2 | 92 | 515.2 | 42 | 2.3 | 92 | 5.1 |
| 43 | 240.8 | 93 | 520.8 | 43 | 2.4 | 93 | 5.2 |
| 44 | 246.4 | 94 | 526.4 | 44 | 2.4 | 94 | 5.2 |
| 45 | 252.0 | 95 | 532.0 | 45 | 2.5 | 95 | $5 \cdot 3$ |
| 46 | 257.6 | 96 | 537.6 | 46 | 2.6 | 96 | $5 \cdot 4$ |
| 47 | 263.2 | 97 | 543.2 | 47 | 2.6 | 97 | 5.4 |
| 48 | 268.8 | 98 | 548.8 | 48 | 2.7 | 98 | $5 \cdot 5$ |
| 49 | 274.4 | 99 | 554.4 | 49 | 2.7 | 99 | $5 \cdot 5$ |
| 50 | 280.0 | 100 | 560.0 | 50 | 2.8 | 100 | 5.6 |


| MIL.к. | FAT. | milk. | Fat. | milk. | Fat. | milk. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 5.7 | 51 | 290.7 | 1 |  | 51 | 2.9 |
| 2 | II 4 | 52 | 296.4 | 2 | . I | 52 | 2.9 |
| 3 | 17.1 | 53 | 302.1 | 3 | . 2 | 53 | 3.0 |
| 4 | 22.8 | 54 | 307.8 | 4 | . 2 | 54 | 3.1 |
| 5 | 28.5 | 55 | 313.5 | 5 | . 3 | 55 | 3.1 |
| 6 | 34.2 | 56 | 319.2 | 6 | . 3 | 56 | 3.2 |
| 7 | 39.9 | 57 | 3249 | 7 | . 4 | 57 | 3.2 |
| 8 | 45.6 | 58 | 330.6 | 8 | . 4 | 58 | $3 \cdot 3$ |
| 9 | 51.3 | 59 | 336.3 | 9 | . 5 | 59 | $3 \cdot 3$ |
| 10 | 57.0 | 60 | 342.0 | 10 | . 6 | 60 | 3.4 |
| 11 | 62.7 | 61 | 347.7 | 11 | . 6 | 61 | 3.5 |
| 12 | 68.4 | 62 | 353.4 | 12 | . 7 | 62 | 3.5 |
| 13 | 74.1 | 63 | 359.1 | 13 | . 7 | 63 | 3.6 |
| 14 | 79.8 | 64 | 364.8 | 14 | . 8 | 64 | 3.6 |
| 15 | 85.5 | 65 | 370.5 | 15 | . 8 | 65 | 3.7 |
| 16 | 91.2 | 66 | 376.2 | 16 | . 9 | 66 | 3.7 |
| 17 | 96.9 | 67 | 381.9 | 17 | . 9 | 67 | 3.8 |
| 18 | 102.6 | 68 | 387.6 | 18 | I. 0 | 68 | 3.9 |
| 19 | 108.3 | 69 | 393.3 | 19 | I. I | 69 | 3.9 |
| 20 | 114.0 | 70 | 399.0 | 20 | 1.1 | 70 | 4.0 |
| 21 | 119.7 | 71 | 404.7 | 21 | 1.2 | 71 | 4.0 |
| 22 | 125.4 | 72 | 410.4 | 22 | 1.2 | 72 | 4.1 |
| 23 | I31. 1 | 73 | 416.1 | 23 | 1.3 | 73 | 4. I |
| 24 | 136.8 | 74 | 42 I .8 | 24 | 1.3 | 74 | 4.2 |
| 25 | 142.5 | 75 | 427.5 | 25 | 1.4 | 75 | 4.3 |
| 26 | 148.2 | 76 | 433.2 | 26 | 1.5 | 76 | 4.3 |
| 27 | 153.9 | 77 | 438.9 | 27 | I. 5 | 77 | 4.4 |
| 28 | 159.6 | 78 | 444.6 | 28 | 1. 6 | 78 | 4.4 |
| 29 | 165.3 | 79 | $45^{\circ} \cdot 3$ | 29 | 1.0 | 79 | 4.5 |
| 30 | 171.0 | 80 | 456.0 | 30 | 1.7 | 80 | 4.5 |
| 31 | 176.7 | 8 I | 461.7 | 31 | 1.7 | 8 I | 4.6 |
| 32 | 182.4 | 82 | 457.4 | 32 | 1.8 | 82 | 4.7 |
| 33 | 188.1 | 83 | 473.1 | 33 | 1.9 | 83 | 4.7 |
| 34 | 193.8 | 84 | 478.8 | 34 | 1.9 | 84 | 4.8 |
| 35 | 199.5 | 85 | 484.5 | 35 | 2.0 | 85 | 4.8 |
| 36 | 205.2 | 86 | 490.2 | 36 | 2.0 | 86 | 4.9 |
| 37 | 210.9 | 87 | 495.9 | 37 | 2.1 | 87 | 4.9 |
| 38 | 216.6 | 88 | 501.6 | 38 | 2.1 | S8 | 5.0 |
| 39 | 222.3 | 89 | 507.3 | 39 | 2.2 | 89 | 5.1 |
| 40 | 228.0 | 90 | 513.0 | 40 | 2.3 | 90 | 5.1 |
| 4 I | 233.7 | 91 | 518.7 | 4 I | 2.3 | 91 | 5.2 |
| 42 | 239.4 | 92 | 524.4 | 42 | 2.4 | 92 | 5.2 |
| 43 | 245.1 | 93 | 530.1 | 43 | 2.4 | 93 | 5.3 |
| 44 | 250.8 | 94 | 535.8 | 44 | 2.5 | 94 | 5.3 |
| 45 | 256.5 | 95 | 54 I .5 | 45 | 2.5 | 95 | $5 \cdot 4$ |
| 46 | 262.2 | 96 | $5+7.2$ | 46 | 2.6 | 96 | $5 \cdot 5$ |
| 47 | 267.9 | 97 | 552.9 | 47 | 2.7 | 97 | 5.5 |
| 48 | 273.6 | 98 | 558.6 | 48 | 2.7 | 98 | 5.6 |
| 49 | 279.3 | 99 | 564.3 | 49 | 2.8 | 99 | 5.6 |
| 50 | 285.0 | 100 | 570.0 | 50 | 2.8 | 100 | 5.7 |


| MILK. | FAT. | milk. | FAT. | MILK. | FAT. | milk. | FAT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | 5.8 | 51 | 295.8 | 1 |  | 51 | 2.9 |
| 2 | 11.6 | 52 | 301.6 | 2 | . | 52 | 3.0 |
| 3 | 17.4 | 53 | 307.4 | 3 | . 2 | 53 | 3.1 |
| 4 | 23.2 | 54 | 313.2 | 4 | . 2 | 54 | 3.1 |
| 5 | 29.0 | 55 | 319.0 | 5 | . 3 | 55 | 3.2 |
| 6 | 34.8 | 56 | 324.8 | 6 | . 3 | 56 | 3.2 |
| 7 | 40.6 | 57 | 330.6 | 7 | . 4 | 57 | $3 \cdot 3$ |
| 8 | 46.4 | 58 | 336.4 | 8 | . 4 | 58 | $3 \cdot 3$ |
| 9 | 52.2 | 59 | 342.2 | 9 | . 5 | 59 | $3 \cdot 4$ |
| 10 | 58.0 | 60 | 348.0 | 10 | . 6 | 60 | 3.5 |
| 11 | 63.8 | 61 | 353.8 | 11 | . 6 | 61 | 3.5 |
| 12 | 69.6 | 62 | 359.6 | 12 | . 7 | 62 | 3.6 |
| 13 | 75.4 | 63 | 365.4 | 13 | . 7 | 63 | 3.6 |
| 14 | 8 I .2 | 64 | 371.2 | 14 | . 8 | 64 | 3.7 |
| 15 | 87.0 | 65 | 377.0 | 15 | . 9 | 65 | 3.8 |
| 16 | 92.8 | 66 | 382.8 | 16 | . 9 | 66 | 3.8 |
| 17 | 98.6 | 67 | 388.6 | 17 | 1.0 | 67 | 3.9 |
| 18 | 104.4 | 68 | 394.4 | 18 | 1.0 | 68 | 3.9 |
| 19 | 110.2 | 69 | 400.2 | 19 | I. I | 69 | 4.0 |
| 20 | 116.0 | 70 | 406.0 | 20 | 1.1 | 70 | 4.0 |
| 21 | 12 I .8 | 71 | 411.8 | 21 | 1.2 | 71 | 4. I |
| 22 | 127.6 | 72 | 417.6 | 22 | 1.3 | 72 | 4.2 |
| 23 | 133.4 | 73 | 423.4 | 23 | 1.3 | 73 | 4.2 |
| 24 | 139.2 | 74 | 429.2 | 24 | 1.4 | 74 | 4.3 |
| 25 | 145.0 | 75 | 435.0 | 25 | 1.4 | 75 | $4 \cdot 3$ |
| 26 | 150.8 | 76 | 440.8 | 26 | I. 5 | 76 | 4.4 |
| 27 | 156.6 | 77 | 446.6 | 27 | 1.5 | 77 | 4.4 |
| 28 | 162.4 | 78 | 452.4 | 28 | 1.6 | 78 | 4.5 |
| 29 | 168.2 | 79 | 458.2 | 29 | 1.7 | 79 | 4.6 |
| 30 | 174.0 | 80 | 464.0 | 30 | 1.7 | 80 | 4.6 |
| 3 I | 179.8 | 81 | 469.8 | 31 | 1.8 | 81 | 4.7 |
| 32 | 185.6 | 82 | 475.6 | 32 | 1.8 | 82 | 4.7 |
| 33 | 191.4 | 83 | 48 I .4 | 33 | 1.9 | 83 | 4.8 |
| 34 | 197.2 | 84 | 487.2 | 34 | 2.0 | 84 | 4.9 |
| 35 | 203.0 | 85 | $493 .{ }^{\circ}$ | 35 | 2.0 | 85 | 4.9 |
| 36 | 208.8 | 86 | 498.8 | 36 | 2.1 | 86 | 5.0 |
| 37 | 214.6 | 87 | 504.6 | 37 | 2. 1 | 87 | 5.0 |
| 38 | 220.4 | 88 | 510.4 | 38 | 2.2 | 88 | 5.1 |
| 39 | 226.2 | 89 | 516.2 | 39 | 2.2 | 89 | 5.1 |
| 40 | 232.0 | 90 | 522.0 | 40 | 2.3 | 90 | 5.2 |
| 41 | 237.8 | 91 | 527.8 | 41 | 2.4 | 91 | 5.3 |
| 42 | 243.6 | 92 | 533.6 | 42 | 2.4 | 92 | $5 \cdot 3$ |
| 43 | 249.4 | 93 | 539.4 | 43 | 2.5 | 93 | 5.4 |
| 44 | 255.2 | 94 | 545.2 | 44 | 2.5 | 94 | 5.4 |
| 45 | 261.0 | 95 | 551.0 | 45 | 2.6 | 95 | 5.5 |
| 46 | 266.8 | 96 | 556.8 | 46 | 2.6 | 96 | $5 \cdot 5$ |
| 47 | 272.6 | 97 | 562.6 |  | 2.7 | 97 | 5.6 |
| 48 | 278.4 | 98 | 568.4 | 48 | 2.8 | 98 | 5.7 |
| 49 | 284.2 | 99 | 574.2 | 49 | 2.8 | 99 | 5.7 |
| 50 | 290.0 | 100 | 580.0 | 50 | 2.9 | 100 | 5.8 |

5.9 PER CENT. TEST.

| MILK. | fat. | MILK. | FAT. | MILK. | FAT. | Milk. | Fat. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 5.9 | 5 I | 300.9 | 1 |  | 51 | 3.0 |
| 2 | II. 8 | 52 | 306.8 | 2 | I | 52 | 3.0 |
| 3 | 17.7 | 53 | 312.7 | 3 | . 2 | 53 | 3.1 |
| 4 | 23.6 | 54 | 318.6 | 4 | . 2 | 54 | 3.2 |
| 5 | 29.5 | 55 | 324.5 | 5 | . 3 | 55 | 3.2 |
| 6 | 35.4 | 56 | 330.4 | 6 | . 3 | 56 | $3 \cdot 3$ |
| 7 | 41.3 | 57 | 336.3 | 7 | . 4 | 57 | $3 \cdot 3$ |
| 8 | 47.2 | 58 | 342.2 | 8 | . 5 | 58 | 3.4 |
| 9 | 53.1 | 59 | 348. 1 | 9 | . 5 | 59 | 3.5 |
| 10 | 59.0 | 60 | 354.0 | 10 | . 6 | 60 | 3.5 |
| 1 I | 64.9 | 61 | 359.9 | 11 | . 6 | 61 | 3.6 |
| 12 | 70.8 | 62 | 365.8 | 12 | . 7 | 62 | 3.6 |
| 13 | 76.7 | 63 | 371.7 | 13 | . 7 | 63 | 3.7 |
| 14 | 82.6 | 64 | 377.6 | 14 | . 8 | 64 | 3.8 |
| 15 | 88.5 | 65 | 383.5 | 15 | . 9 | 65 | 3.8 |
| 16 | 94.4 | 66 | 389.4 | 16 | . 9 | 66 | 3.9 |
| 17 | 100.3 | 67 | 395.3 | 17 | 1.0 | 67 | 3.9 |
| 18 | 106.2 | 68 | 401.2 | 18 | 1.0 | 68 | 4.0 |
| 19 | I 12. 1 | 69 | 407. 1 | 19 | I. 1 | 69 | 4.1 |
| 20 | 118.0 | 70 | 413.0 | 20 | 1.2 | 70 | 4.1 |
| 21 | 123.9 | 71 | 418.9 | 21 | 1.2 | 71 | 4.2 |
| 22 | 129.8 | 72 | 424.8 | 22 | I. 3 | 72 | 4.2 |
| 23 | 135.7 | 73 | 430.7 | 23 | 1.3 | 73 | 4.3 |
| 24 | 141.6 | 74 | 436.6 | 24 | 1.4 | 74 | 4.3 |
| 25 | 147.5 | 75 | 442.5 | 25 | I. 5 | 75 | 4.4 |
| 26 | 153.4 | 76 | 448.4 | 26 | I. 5 | 76 | 4.5 |
| 27 | 159.3 | 77 | 454.3 | 27 | I. 6 | 77 | 4.5 |
| 28 | 165.2 | 78 | 460.2 | 28 | I. 6 | 78 | 4.6 |
| 29 | 17 I .1 | 79 | 466.1 | 29 | 1.7 | 79 | 4.6 |
| 30 | 177.0 | 80 | 472.0 | 30 | 1.8 | 80 | 4.7 |
| 31 | 182.9 | 81 | 477.9 | 31 | 1.8 | 8 I | 4.8 |
| 32 | 188.8 | 82 | 483.8 | 32 | 1.9 | 82 | 4.8 |
| 33 | 194.7 | 83 | 489.7 | 33 | 1.9 | 83 | 4.9 |
| 34 | 200.6 | 84 | 495.6 | 34 | 2.0 | 84 | 4.9 |
| 35 | 206.5 | 85 | 501.5 | 35 | 2.0 | 85 | 5.0 |
| 36 | 212.4 | 86 | 507.4 | 36 | 2.1 | 86 | 5.1 |
| 37 | 218.3 | 87 | 513.3 | 37 | 2.2 | 87 | 5.1 |
| 38 | 224.2 | 88 | 519.2 | 38 | 2.2 | 88 | 5.2 |
| 39 | 230. I | 89 | 525.1 | 39 | 2.3 | 89 | 5.2 |
| 40 | 236.0 | 90 | 531.0 | 40 | 2.3 | 90 | 5.3 |
| 41 | 241.9 | 91 | 536.9 | 4 I | 2.4 | 9 I | 5.3 |
| 42 | 247.8 | 92 | 542.8 | 42 | 2.5 | 92 | 5.4 |
| 43 | 253.7 | 93 | 548.7 | 43 | 2.5 | 93 | 5.5 |
| 44 | 259.6 | 94 | 554.6 | 44 | 2.6 | 94 | 5.5 |
| 45 | 265.5 | 95 | 560.5 | 45 | 2.6 | 95 | 5.6 |
| 46 | 271.4 | 96 | 566.4 | 46 | 2.7 | 96 | 5.6 |
| 47 | 277.3 | 97 | 572.3 | 47 | 2.8 | 97 | 5.7 |
| 48 | 283.2 | 98 | 578.2 | 48 | 2.8 | 98 | 5.8 |
| 49 | 289.1 | 99 | 584.1 | 49 | 2.9 | 99 | 5.8 |
| 50 | 295.0 | 100 | 590.0 | 50 | 2.9 | 100 | 5.9 |

## MONEY CALCULATING TABLES.

14 Cent Table.
$14 \times 1=14$ $14 \times 2=28$
$14 \times 3=42$
$14 \times 4=56$
$14 \times 5=70$
$14 \times 6=84$
$14 \times 7=98$
$14 \times 8=112$
$14 \times 9=126$
$141 / 2$ Cent Table.
$145 \times 1=145$
$145 \times 2=290$
$145 \times 3=435$
$145 \times 4=5$ So
$145 \times 5=725$
$145 \times 6=870$
$145 \times 7=1015$
$145 \times 8=1160$
$145 \times 9=1305$
15 Cent Table.
$15 \times 1=15$
$15 \times 2=30$
$15 \times 3=45$
$15 \times 4=60$
$15 \times 5=75$
$15 \times 6=90$
$15 \times 7=105$
$15 \times S=120$
$15 \times 9=135$
$151 / 2$ Cent Table.
$155 \times 1=155$
$155 \times 2=310$
$155 \times 3=465$
$155 \times 4=620$
$155 \times 5=775$
$155 \times 6=930$
$155 \times 7=1085$
$155 \times 8=1240$
$155 \times 9=1395$

16 Cent Table. 18 Cent Table.
$18 \times 1=18$
$18 \times 2=36$
$18 \times 3=54$
$18 \times 4=72$
$18 \times 5=90$
$18 \times 6=108$
$18 \times 7=126$
$18 \times 8=144$
$18 \times 9=162$

20 Cent Table.

$$
\begin{aligned}
& 20 \times 1=20 \\
& 20 \times 2=40 \\
& 20 \times 3=60 \\
& 20 \times 4=80 \\
& 20 \times 5=100 \\
& 20 \times 6=120 \\
& 20 \times 7=140 \\
& 20 \times 8=160 \\
& 20 \times 9=180
\end{aligned}
$$

16 $1 / 2$ Cent Table.
$165 \times 1=165$
$165 \times 2=330$
$165 \times 3=495$
$165 \times 4=660$
$165 \times 5=825$
$165 \times 6=990$
$165 \times 7=1155$
$165 \times 8=1320$
$165 \times 9=1485$
17 Cent Table.
$17 \times 1=17$
$17 \times 2=34$
$17 \times 3=51$
$17 \times 4=68$
$17 \times 5=85$
$17 \times 6=102$
$17 \times 7=119$
$17 \times 8=136$
$17 \times 9=153$
$17^{1 / 2}$ Cent Table,
$175 \times 1=175$
$175 \times 2==350$
$175 \times 3=525$
$175 \times 4=700$
$175 \times 5=875$
$175 \times 6=1050$
$175 \times 7=1225$
$175 \times 8=1400$
$175 \times 9=1575$

181/2 Cent Table.
$185 \times 1=185$
$185 \times 2=370$
$185 \times 3=555$
$185 \times 4=740$
$185 \times 5=925$
1 $85 \times 6=11$ по
$185 \times 7=1295$
$185 \times 8=1480$
$185 \times 9=1665$

20 $1 / 2$ Cent Table.
$205 \times 1=205$
$205 \times 2=410$
$205 \times 3=615$
$205 \times 4=820$
$205 \times 5=1025$
$205 \times 6=1230$
$205 \times 7=1435$
$205 \times 8=1640$
$205 \times 9=1845$
19 Cent Table.

## 2 2 Cent Table.

$19 \times 1=19$
$19 \times 2=38$
$19 \times 3=57$
$19 \times 4=76$
$19 \times 5=95$
$19 \times 6=114$
$19 \times 7=133$
$19 \times 8=152$
$19 \times 9=171$
$2 \mathrm{I} \times \mathrm{I}=2 \mathrm{I}$
$21 \times 2=42$
$21 \times 3=63$
$21 \times 4=84$
$21 \times 5=105$
$21 \times 6=126$
$21 \times 7=147$
$21 \times 8=168$
$21 \times 9=189$
19浚 Cent Table.
$195 \times 1=195$
$195 \times 2=390$
$195 \times 3=585$
$195 \times 4=780$
$195 \times 5=975$
$195 \times 6=1170$
$195 \times 7=1365$
$195 \times 8=1560$
$195 \times 9=1755$
$211 / 2$ Cent Table. $215 \times 1=215$ $215 \times 2=430$ $215 \times 3=645$
$215 \times 4=860$
$215 \times 5=1075$
$215 \times 6=1290$
$215 \times 7=1505$
$215 \times 8=1720$
$215 \times 9=1935$

| 22 Cent Table. | 24 Cent Table. | 26Cent Table. | 28 Cent Table. |
| :---: | :---: | :--- | :---: |
| $22 \times 1=22$ | $24 \times 1=24$ | $26 \times 1=26$ | $28 \times 1=28$ |
| $22 \times 2=44$ | $24 \times 2=48$ | $26 \times 2=52$ | $28 \times 2=56$ |
| $22 \times 3=66$ | $24 \times 3=72$ | $26 \times 3=78$ | $28 \times 3=84$ |
| $22 \times 4=88$ | $24 \times 4=96$ | $26 \times 4=104$ | $28 \times 4=112$ |
| $22 \times 5=110$ | $24 \times 5=120$ | $26 \times 5=130$ | $28 \times 5=140$ |
| $22 \times 6=132$ | $24 \times 6=144$ | $26 \times 6=156$ | $28 \times 6=168$ |
| $22 \times 7=154$ | $24 \times 7=168$ | $26 \times 7=182$ | $28 \times 7=196$ |
| $22 \times 8=176$ | $24 \times 8=192$ | $26 \times 8=208$ | $28 \times 8=224$ |
| $22 \times 9=198$ | $24 \times 9=216$ | $26 \times 9=234$ | $28 \times 9=252$ |

$221 / 2$ Cent Table.
$225 \times \mathrm{r}=225$
$225 \times 2=450$
$225 \times 3=675$
$225 \times 4=900$
$225 \times 5=1125$
$225 \times 6=1350$
$225 \times 7=1575$
$225 \times 8=1500$
$225 \times 9=2025$
23 Cent Table.
$23 \times 1=23$
$23 \times 2=46$
$23 \times 3=69$
$23 \times 4=92$
$23 \times 5=115$
$23 \times 6=138$
$23 \times 7=161$
$23 \times 8=184$
$23 \times 9=207$
$231 / 2$ Cent Table. $235 \times 1=235$ $235 \times 2=470$ $235 \times 3=705$ $235 \times 4=940$ $235 \times 5=1175$ $235 \times 6=1410$ $235 \times 7=1645$ $235 \times 8=1880$ $235 \times 9=2115$

24 Cent Table.
$24 \times 1=24$
$24 \times 2=48$
$24 \times 3=72$
$24 \times 4=96$
$24 \times 5=120$
$24 \times 6=144$
$24 \times 8=192$
$24 \times 9=216$
24 $1 / 2$ Cent Table.
$245 \times 1=245$
$245 \times 2=490$
$245 \times 3=735$
$245 \times 4=980$
$245 \times 5=1225$
$245 \times 6=1470$
$245 \times 7=1715$
$245 \times 8=1960$
$245 \times 9=2205$
25 Cent Table.

26 $1 / 2$ Cent Table.
$265 \times \mathrm{x}=265$
$265 \times 2=530$
$265 \times 3=795$
$265 \times 4=1060$
$265 \times 5=1325$
$265 \times 6=1590$
$265 \times 7=1855$
$265 \times 8=2120$
$265 \times 9=2385$
27 Cent Table.
$25 \times 1=25$
$25 \times 2=50$
$25 \times 3=75$
$25 \times 4=100$
$25 \times 5=125$
$25 \times 6=150$
$25 \times 7=175$
$25 \times 8=200$
$25 \times 9=225$
$251 / 2$ Cent Table.
$255 \times 1=255$
$255 \times 2=510$
$255 \times 3=765$
$255 \times .4=1020$
$255 \times 5=1275$
$255 \times 6=1530$
$255 \times 7=1785$
$255 \times 8=2040$
$255 \times 9=2295$
$27 \times \mathrm{I}=27$
$27 \times 2=54$
$27 \times 3=81$
$27 \times 4=108$
$27 \times 5=135$
$27 \times 6=162$
$27 \times 7=189$
$27 \times 8=216$
$27 \times 9=243$
$271 / 2$ Cent Table.
$275 \times 1=275$
$275 \times 2=55^{\circ}$
$275 \times 3=825$
$275 \times 4=1100$
$275 \times 5=1375$
$275 \times 6=1650$
$275 \times 7=1925$
$275 \times 8=2200$
$275 \times 9=2475$
$281 / 2$ Cent Table.
$285 \times 1=285$
$285 \times 2=570$
$285 \times 3=855$
$285 \times 4=1140$
$285 \times 5=1425$
$285 \times 6=1710$
$285 \times 7=1995$
$285 \times 8=2280$
$285 \times 9=2565$
29 Cent Table.

$$
\begin{aligned}
& 29 \times 1=29 \\
& 29 \times 2=58 \\
& 29 \times 3=87 \\
& 29 \times 4=116 \\
& 29 \times 5=145 \\
& 29 \times 6=174 \\
& 29 \times 7=203 \\
& 29 \times 8=232 \\
& 29 \times 9=261
\end{aligned}
$$

29 $1 / 2$ Cent Table.
$295 \times 1=295$
$295 \times 2=590$
$295 \times 3=885$
$295 \times 4=1180$
$295 \times 5=1475$
$295 \times 6=1770$
$295 \times 7=2065$
$295 \times 8=2360$
$295 \times 9=2655$

## DIRECTIONS FOR MAKING DIVIDENDS

## In Creameries and Cheese Factories According to the Per Cents. of Fat in Milk Delivered, as Recommended by Dr. Babcock.

Find the amount of fat contained in the milk of each patron for any period desired by multiplying the pounds of milk expressed in hundreds by the per cent. of fat found by the test. Add the amount of fat from all the patrons together, thus obtaining the total pounds of fat delivered at the factory. Deduct the expenses of manufacture, etc., from the money received from sales and divide the remainder by the total fat. This gives the price to be paid for each pound of fat. Multiply the pounds of fat delivered by each patron by the price; the product will be the amount which he is to receive.
If it is desired to know the number of pounds of butter made from each patron's milk, divide the total yield of butter by the total fat delivered, the quotient will be the amount of butter made from one pound of fat. The fat delivered by each patron multiplied by the ratio will give the pounds of butter to be credited to each patron.

The accompanying table gives the butter yield from 100 lbs . of milk when the pounds of butter from I lb. of fat range from I. io to I. 20 , and for milks containing from 3 to 5.5 per cent. of fat. To use the table find in the upper horizontal line the number corresponding most nearly to the number of pounds of butter from Ilb . of fat; the vertical column in which this falls gives the pounds of butter from roo lbs. of milk containing the per cent. of fat given in the outside columns.

Example: A creamery receives during one month $250,000 \mathrm{lbs}$. of milk which contained $9,53 \mathrm{llbs}$. of fat; the yield of butter for the same period was $\mathrm{r} 0,983 \mathrm{lbs}$., which sold for 29 cents per pound, bringing $\$ 3,185.07$. The expense for making, etc., was four cents per pound, amounting to $\$ 439.32$, leaving $\$ 2,745.75$ to be divided among the patrons. Dividing this sum by 9,53 r, the total pounds of fat, gives $\$ .288$ per pound for the fat. This multiplied by the number of pounds of fat in each patron's milk gives the amount which he should be paid.
The number of pounds of butter, 10,983 , divided by $9,53 \mathrm{r}$, the number of pounds of fat, gives I .152 lbs . of butter from each pound of fat. The column headed 1.15 in the table is nearest to this ratio and will therefore give the butter obtained from ioo lbs of milk containing different per cents. of fat.
If a patron delivered $9,420 \mathrm{lbs}$. of milk containing 3.2 per cent. of fat during the period considered, his milk would have contained 30 r. 44 lbs. of fat, which, at 28.8 cents per pound, would have amounted to $\$ 86.8 \mathrm{I}$. It would have made $30 \mathrm{r} .44 \times \mathrm{x} .152,347.26 \mathrm{lbs}$. of butter. In the column headed 1.15 in the table, opposite 3.2 per cent. of fat, we find 3.68 , which is the number of pounds of butter from 100 lbs . of this patron's milk. The error from the use of the table in this way will never amount to more than $1 / 2 \mathrm{oz}$. per 100 lbs . of milk.

SURPLUS BUTTER TABLE．

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RELATIVE VALUE Table．

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RELATIVE VALUE TABLE.


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