

CHAPTER 15 - Part B: Waves and Surface Tension

Reading: Sections 15.1–15.3 and 15.5 of the NEW VERSION of Chapter 15, version 0215.2.pdf

Notes:

- 1. I decided to wait until next week to assign the problem of the surge wave (“shock wave”) in shallow water, for which I showed a video clip on Wednesday. It will be better understood in the context of chapter 16.*
- 2. I ran out of time on Wednesday this week, in class, and didn’t manage to discuss surface tension. I’ll do that, briefly, this coming Monday.*
- 3. I wanted to assign Exercise 15.6 on Breaking of a Dam, but I’m very confused about the solution. I’m asking Roger for help, when he gets back from travel later this week. If I get myself unconfused, I may rewrite that exercise and offer it to you as an alternative to Exercise 15.8.*

Problems

A. DO

Exercise 15.1 Fluid motions in gravity waves, OR

Exercise 15.2 Surface tension

B. DO

Exercise 15.5 Shallow-water waves with variable depth, OR

Exercise 15.4 Ship waves

C. DO Exercise 15.8 Two-soliton solution.