

CHAPTER 15 - Part B: Water Waves, Solitons, and Surface Tension

Remember: There is no class on Monday, 21 February because of President's Day. I will lecture on the first half of Chapter 16 on Wednesday 23 February and will assign exercises from Chapter 16 then.

Reading: Sections 15.1— 15.3. You might also want to read Sections 16.2, 16.5, and 16.6 about which I lectured on Wednesday this week; but I will not assign problems from chapter 16 until next week.

Problems: From version 0415.2.K of Chapter 15

A. DO:

1. Exercise 15.1 Fluid motions in gravity waves, OR
2. Exercise 15.2 Force balance for an interface between two fluids

C. DO:

1. Exercise 15.5 Shallow water waves with variable depth; tsunamis, OR
2. Exercise 15.4 Ship waves

B. DO:

1. Exercise 15.8 Two soliton solution: parts (b) and (c). OR
2. Exercise 15.7 Breaking of a dam