Activity Week 2: Questions of the day
Reference: Lecture Notes 1.3 Example 3 (page 5), and Lecture Notes 1.2 Example 1 (page 2).

These questions are about

Off-line Homework 1.1/1.2/1.3 page 5
WebAssign Section 1.1/1.2/1.3#19

Do #19. Then answer these questions.

1. What are the input and output of the cost function? What are their units?

2. What is the slope of the cost function? What are the slope's units?

3. What is the fixed cost? What is the variable cost?

4. a. Use the cost function to estimate the cost of manufacturing 36 Kinects per hour. (This is part (c) of the Off-line Homework problem).

   b. Suppose you currently produce 35 Kinects per hour. What is the additional cost to produce the 36\textsuperscript{th} Kinect each hour?

   c. What is the difference between questions (4a) and (4b)?

5. What does $C(8)$ represent?

6. What does $C(8) - C(7)$ represent?
Activity Week 2: Problem of the Day
Reference: Lecture Notes 1.3 Example 3 (page 5), and Lecture Notes 1.2 Example 1 (page 2).

This is ebook 1.3 #80.
A soft-drink manufacturer can produce 1,000 cases of soda in a week at a total cost of $6,000, and 1,500 cases of soda at a total cost of $8,500.

a. Write a formula for the cost function.

b. What are the fixed and variable costs?

c. Suppose the current production level is 1500 cases per week. What is the additional cost to produce the 1,501st case each week?