## Math 115 Fall 2018 Worksheet 1 – Section 1.1

**Problem 1.** Which graph best matches each of the following stories? Write a story for the remaining graph.

- (a) I had just left home when I realized I had forgotten my books, so I went back to pick them up.
- (b) Things went fine until I had a flat tire.
- (c) I started out calmly but sped up when I realized I was going to be late.



**Problem 2.** Residents in the town of Maple Grove who are connected to the municipal water supply are billed a fixed amount monthly plus a charge for each cubic foot of water used. A household using 1000 cubic feet was billed \$40, while one using 1600 cubic feet was billed \$55.

- (a) What is the charge per cubic foot?
- (b) Write an equation for the total cost of a resident's water as a function of cubit feet of water used.
- (c) How many cubic feet of water would lead to a bill of \$100?

**Problem 3.** Match the graphs in the figure with the following equations. (Note that the x and y scales may be unequal.)

