## Math 115 Fall 2018 <br> 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.
(III)

(IV)


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.)
(a) $y=-2.27 x$
(d) $y=0.1 x-27.9$
(b) $y=20.01+1.01 x$
(e) $y=-5.7-200 x$
(c) $y=27.9-0.1 x$
(f) $y=x / 3.14$
(I)

(II)

(III)

(IV)

(V)

(VI)


