Math 1 **HW #2** Writing Linear Equations from Words

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1) A plumber charges $25 for a service call plus $50 per hour of service.

a) Write an equation in slope-intercept form for the cost, *C,* after *h* hours of service.

 *C* = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) What will be the total cost for 8 hours of work?

c) What will be the total cost for 10 hours of work?

2) A candle starts out at a height of 10 inches. When it is lit, it burns at a rate of ½ an inch per hour.

 a) Write an equation in slope-intercept form.

 y = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 b) How tall is the candle after 4 hours?

 c) How tall is the candle after 5 hours?

3) Ms. Potts has 3 cats currently. She has such a big heart, she adopts 2 poor kitties with no homes every week.

 a) Write an equation in slope-intercept form.

 y = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) How many cats will Ms. Potts have after 3 weeks?

c) How many cats will Ms. Potts have after 9 weeks?

d) Will Ms. Potts ever have more than 100 cats?!?!?!?! Do you know how long this will take????