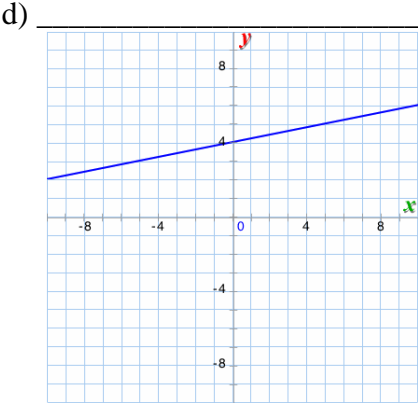
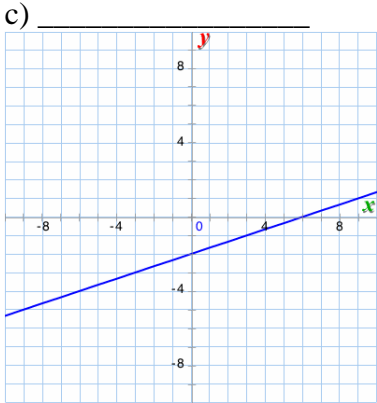
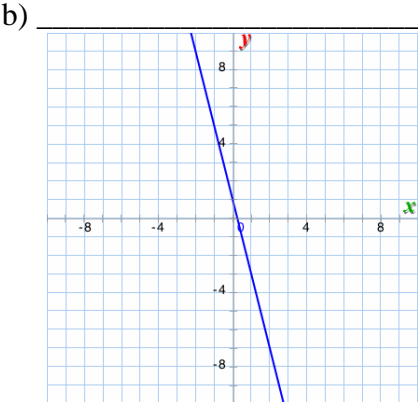
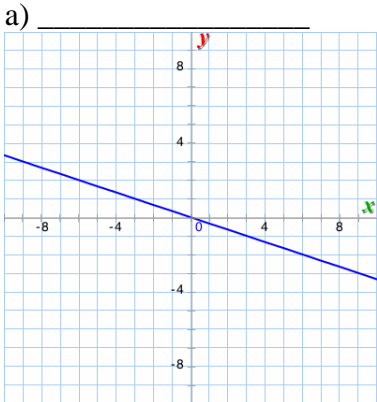


Writing Linear Equations

From Graphs

- 1) Write a linear equation whose slope is 5 and whose y-intercept is -5? _____
- 2) In Spain it costs \$1 (in Euros) to connect a long distance call and it also cost \$0.40 per minute to talk.
 - a. Write a linear equation to model the charges? _____
 - b. How many minutes talking before the total cost is \$5? _____
- 3) Write linear equations in slope-intercept form from the lines graphed:



Point-Slope

- 4) The population of a town was 50,000 in the year 2000 and rising at a rate of 5,000 per year.
 - a. Write a linear equation in slope-intercept form describing the population growth?

 - b. What is the estimated population of the town in the year 2100? _____

5) Write linear equations in slope-intercept form given a slope (m) and a point:

a) $m = 5$ and $(1, 8)$

b) $m = -\frac{2}{5}$ and $(5, -6)$

c) $m = -4$ and $(1, 1)$

d) $m = -5$ and $(1, 9)$

e) $m = -\frac{2}{3}$ and $(3, -3)$

f) $m = \frac{3}{6}$ and $(6, -1)$

6) Describe the process of finding a slope-intercept linear equation given a slope and point on the line?

Two-Point

7) Write a linear equation in slope-intercept given the following two points:

a. $(1, 2)$ and $(5, 6)$

b. $(-6, 5)$ and $(1, -9)$

c. $(-3, -1)$ and $(3, -1)$

d. $(-4, 5)$ and $(-4, -5)$

e. $(4, 5)$ and $(2, -3)$

f. $(-8, 8)$ and $(4, 5)$

8) It costs \$2 for 5 candy bars and it costs \$15 for 50 candy bars.

a. What is the unit rate of the candy bars? _____

b. Model the cost of candy bars with a linear model (equation)? _____

c. How many candy bars can you get for \$100 dollars? _____