

Name _____

Date _____

Midterm Review - chapters 4 and 5

Math 8

Chapter 4 - lines and linear equations

Slope Formula: $m = \frac{y_2 - y_1}{x_2 - x_1}$

1. Determine the slope between each pair of points below:

a) (3, 5) and (6, 9)

b) (-2, 4) and (7, -4)

c) (0, 3) and (-4, -3)

2. Write an equation of a line given the slope and y-intercept:

a) Slope = -1
y-int = 4

b) Slope = 6
y-int = -2

c) Slope = $\frac{1}{2}$
y-int = 0

3. Determine the slope and y-intercept of each of the following linear equations:

a) $y = -x - 1$

b) $2x + 2y = 8$

c) $6x + 4y = 16$

Slope = _____
Y-int = _____

Slope = _____
Y-int = _____

Slope = _____
Y-int = _____

d) $3y - 7x = 9$

e) $2x + y = -7$

f) $2y - x = -4$

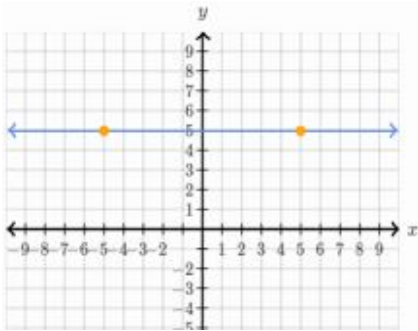
Slope = _____
Y-int = _____

Slope = _____
Y-int = _____

Slope = _____
Y-int = _____

4. Write the slope of each line below then write the equation of the line:

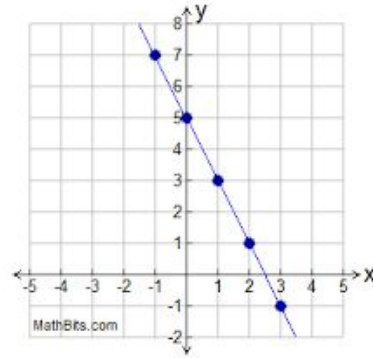
a)



Slope: _____

Equation: _____

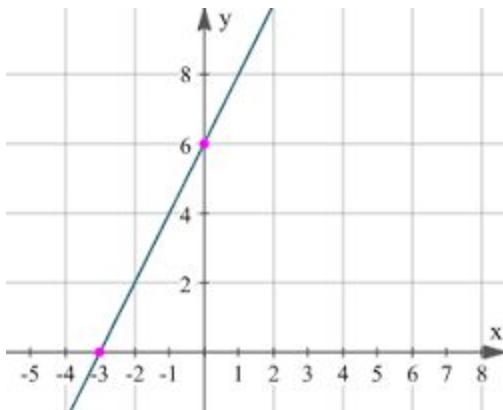
b)



Slope: _____

Equation: _____

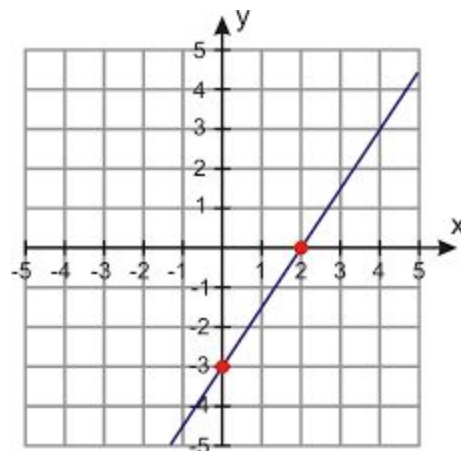
c)



Slope: _____

Equation: _____

d)



Slope: _____

Equation: _____

Chapter 5 - systems of equations

You buy 3 packs of markers and 2 packs of pencils for \$42.50. Your friend buys 5 packs of markers and 3 packs of pencils for \$67.50. Set up a system of equation to model the situation, then determine the cost of one pack of markers and one pack of pencils.