PRACTICE QUIZ
Lessons 4.4, 4.5 and 4.6

Name: _____

Date: _____ Hour: _____

Skills Assessed:

I can find the slope of a line using two points.
I can interpret slope as a rate of change.
I can graph a direct variation equation.
I can write a direct variation equation.
I can graph a line in slope-intercept form.
I can re-write an equation in function form.

1) Find the slope of the line passing through the given points

   (–2, 1) (3, 11)

1) _____

2) Find the slope of the line passing through the given points

   (2, –4) (4, –4)

2) _____

3) Find the value of y so that the line passing through the two points has the given slope.

   $(5, y)$ (7, 4) $m = 2$

3) _____

4) In 1980, a candy bar cost \$0.20. In 2010, a candy bar cost \$1.00. Find the average rate of change of cost per year.

4) _____

5) The variables x and y vary directly when $x = 9$ and $y = 3$. Write an equation that relates the variables.

5) _____

6) Find the slope and y-intercept.

   $y = 2x - 4$

6) m = _____

   b = _____

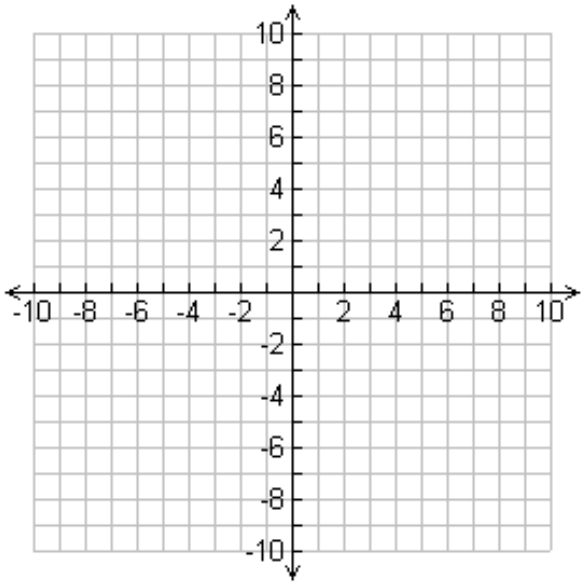
7) Tell whether the lines of the graphs of the equations below are parallel (yes or no). Explain your answer.

   $3x + 2y = 1$ $-2y = 3x - 2$

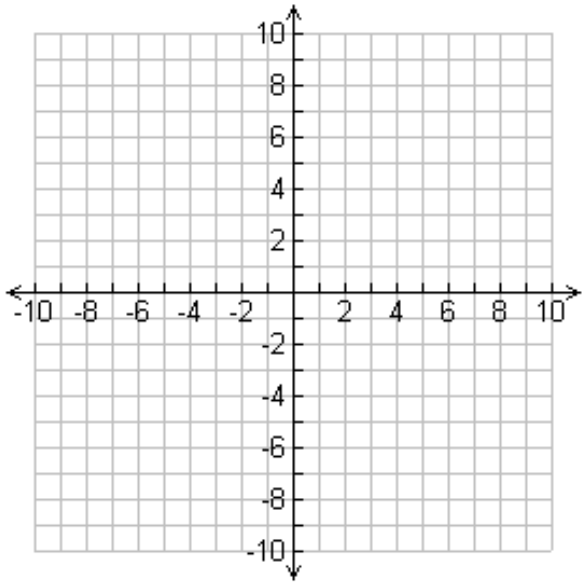
7) _____

Graph each equation. If necessary, write the equation in slope-intercept form first.

8) $y = 4x - 5$



9) $2x + 4y = -12$



10) Howard decides to start jogging every day at the track. He jogs 2 laps the first week and adds 3 laps each week for 6 weeks. Let *t* represent the time in weeks (on the horizontal axis) and *l* represent the number of laps Howard runs (on the vertical axis). Plot the points for the number of laps in one-week intervals. Find the slope and tell what it represents.