Chapter 5, Practice Quiz 2

Lessons 5.4, 5.5, and 5.6

Name: _____

Date: _____ Hour: _____

Skills Assessed:
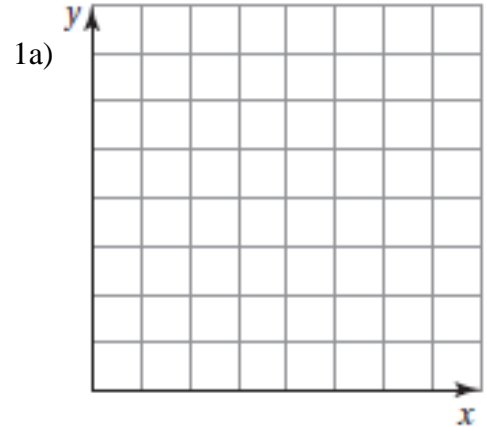
I can use point-slope form to write an equation of a line.
I can write a linear equation in standard form.
I can use point-slope form and standard form to model real-world situations.

1a) The table shows the average number of gallons of milk a family
drinks per week. Create a scatter plot and sketch a line of best fit.

1a)

Family Size	Number of Gallons of Milk
1	1
2	1.5
3	2.2
4	3.8
5	4.7
6	5

1b) Write an equation for your line of best fit.

1b)_____

1c) Use your equation to find the number of gallons a
family of 7 would consume in one week.

1c)_____

1d) Interpret the meaning of the slope.

1d)_____

2) Write an equation in point-slope form of the line that passes
through the point (-4, 2) and has the given slope $m = -5$.

2)_____

3) Write an equation in point-slope form of the line that passes
through the points (-2, -3) and (4, 1). Show your work.

3)_____

4) Rewrite the equation $y + 6 = \frac{1}{2}(x - 12)$ in slope-intercept form.
Show your work.

4)_____

5) You are flying from Houston to Chicago. You leave Houston at 7:30 a.m.
   At 8:35 a.m., you fly over Little Rock, a distance of 455 miles.

    a) Write a linear equation that gives the distance in miles, y,   5a)_____
   in terms of the time, x. Let x represent the number of
   minutes since 7:30 a.m.

    b) Approximately what time will you arrive in Chicago   5b)_____
   if it is 950 miles from Houston?

6) Write the equation $5y - 4x + 40 = 0$ in standard form   6)_____
   with integer coefficients.

7) Write the equation $y = 5x - \dfrac{1}{2}$ in standard form   7)_____
   with integer coefficients.

8) Write the standard form of the equation of the line that passes   8)_____
   through the point (6, 4) and has the slope $m = 5$.

9) Write the standard form of the equation of the line that passes   9)_____
   through the points (3, -7) and (-3, -11). Show your work.

10) Write the standard form of the equation of the horizontal   10)_____
    and vertical lines that pass through the point (5, -3).

11) Your grandmother made 240 ounces of jelly. You have two types of jars. The first holds 10 ounces and
    the second holds 12 ounces. Write an equation that represents the different numbers of 10 ounce jars, x,
    and 12 ounce jars, y, that will hold all of the jelly.

    a) Write an equation that represents the different numbers   11a)_____
   of 10 ounce jars, x, and 12 ounce jars, y, you could make.

    b) Rewrite your equation from part a in slope-intercept form.   11b)_____