Name: _____ Class Period: _____

2.2

Algebra I Agenda
Test Tuesday 10/20!!

				Stamp
Monday	10/12/2015	Objective:	No School	
		Assignment:	Staff Development	
Tuesday	10/13/2015	Objective:	Point-Slope Form	
		Assignment:	Practice #1-11	
Wednesday	10/14/2015	Objective:	Point-Slope Inequalities	
		Assignment:	Practice #1-8	
Thursday	10/15/2015	Objective:	Standard Form	
		Assignment:	Practice #1-6	
Friday	10/16/2015	Objective:	Standard Form Inequalities	
		Assignment:	Practice #1-6 HW 2.2 Due!	

Final Weekly HW Grade: _____

Monday: 1st Attempt (DO NOT ERASE)	Correct Solution:

Tuesday: 1st Attempt (DO NOT ERASE)	Correct Solution:

Wednesday: 1st Attempt (DO NOT ERASE)	Correct Solution:

Thursday: 1st Attempt (DO NOT ERASE)	Correct Solution:

Friday: 1st Attempt (DO NOT ERASE)	Correct Solution:

Warm Up Expectations:
- Try warm up problem(s) on your own on the "First Attempt" side.
- Politely request teacher signature when complete before timer goes off.
- Copy the correct work/solution in the right-hand box.
- Ask questions ☺

When absent...
Write the word "ABSENT" on the first attempt column for 2 points. Copy the correct solution from a shoulder partner on the correct solution column for 1 point.

Warm Up Daily Scores Guide:

Score	Description
3	• Complete first attempt • Teacher signature • Completed correct solution
2	• Two of the three listed above are present
1	• One of the three listed above are present
0	• None of the three listed above are present

Practice – Writing Equations using Point-Slope Formula   **pp 341-348**

Name _____ Date _____ Period _____

1. Write an equation in **slope-intercept form** of a line with a slope of -3 that passes through the point (-2, 4)

2. Write an equation in **slope-intercept form** of a line with a slope of 2 that passes through the point (3, 8)

3. Write an equation in **point-slope form** with a slope of 3 that passes through the point (4, 5)

4. Write an equation in **point-slope form** of a line with a slope of $\frac{3}{4}$ that passes through the point (8, -12)

5. Write an equation in **slope-intercept form** of a line with a slope of 0 that passes through the point (-3, 6)

6. Write an equation in **point-slope form** of a line with a slope of -4 that has a *y*-intercept of -3

7. Which equation describes the line that goes through the point (-5, 1) and has a slope of 1?

    A. $y + 1 = x - 5$
    B. $y + 5 = x - 1$
    C. $y - 1 = -5(x - 1)$
    D. $y - 1 = x + 5$

8. A. What is the **rate of change** of the function $y - 4 = -4(x - 5)$?

B. What is a **point on the line** given by the function $y - 4 = -4(x - 5)$?

9. After 6 weeks of school, 53,000 sheets of computer paper are left. 4,500 sheets are used each (per) week.

Slope: m = _____ Point: (_____ , _____)

A Write an equation that represents this situation where s is the total number of sheets left and w is the number of weeks.

B How many sheets of paper did this school start with?

10. Two students used point-slope form to find an equation that describes the line with a slope of -3 and goes through the point (-5, 2). Who is incorrect? Explain the error.

A
$$y - y_1 = m(x - x_1)$$
$$y - 2 = -3(x - 5)$$

B.
$$y - y_1 = m(x - x_1)$$
$$y - 2 = -3[x - (-5)]$$
$$y - 2 = -3(x + 5)$$

11. A Write an equation of a line in **slope-intercept form** of the graphed line below.

B. Write an equation of a line in **point-slope form** of the graphed line below.

C. Compare the two equations. How is slope-intercept and point slope form alike? Different?
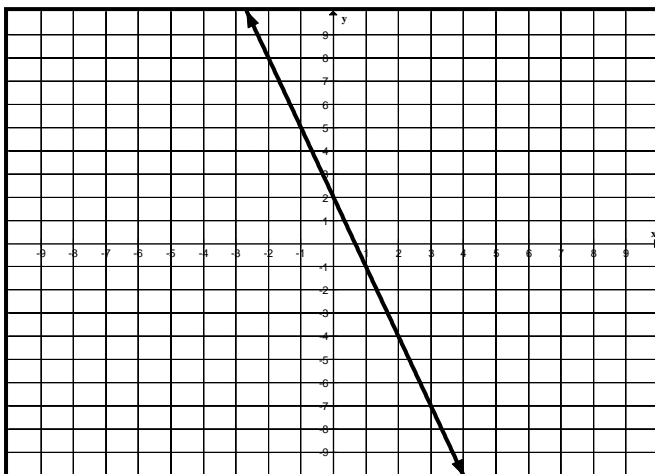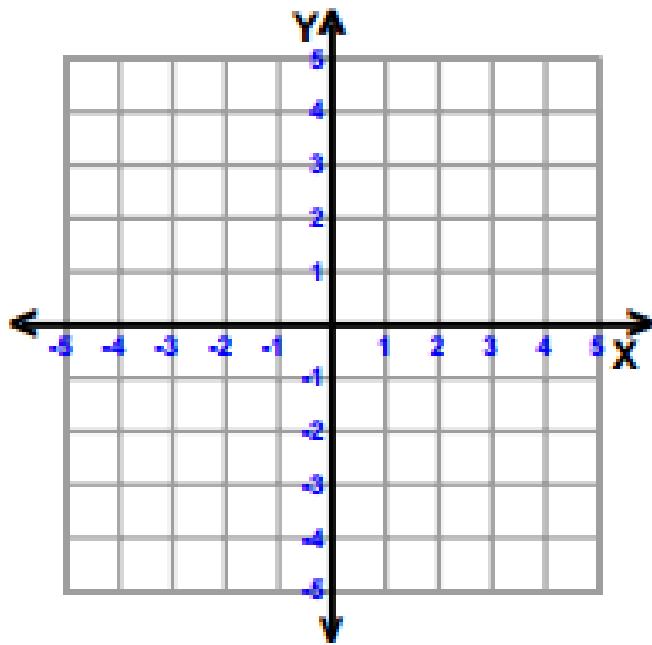
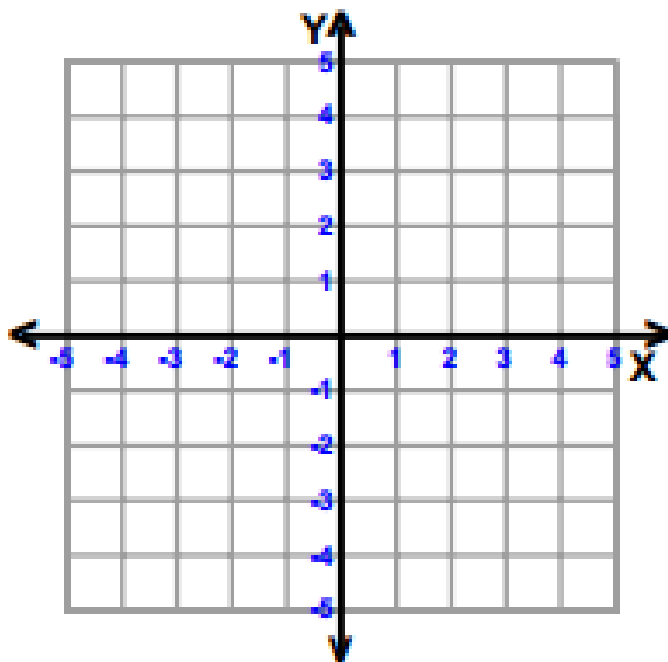**Practice – Point-Slope Form Inequalities**

Name _____ Date _____ Period _____
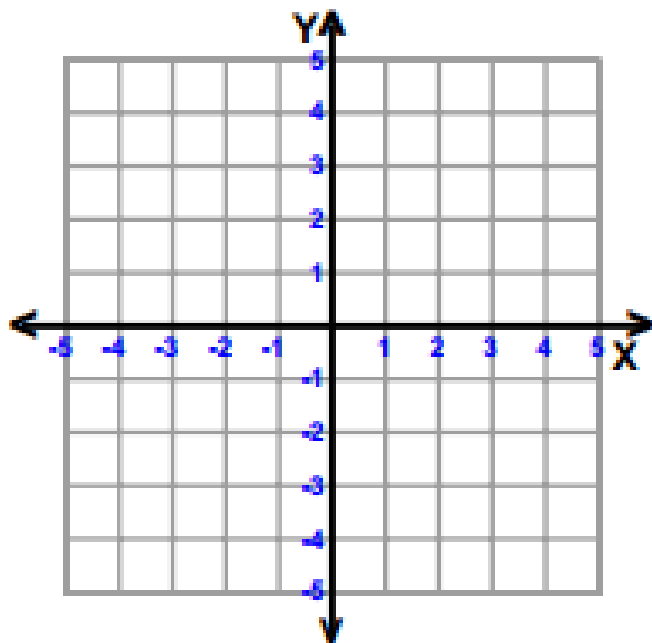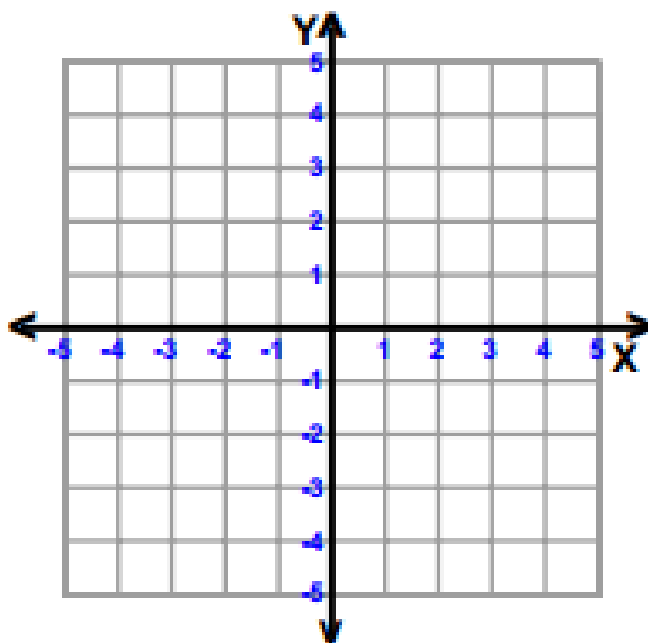
Graph each inequality.

1. $y + 3 \le \dfrac{1}{4}(x + 4)$

2. $y - 0 \ge -\dfrac{1}{3}(x - 3)$

3. $y + 2 < -(x - 4)$
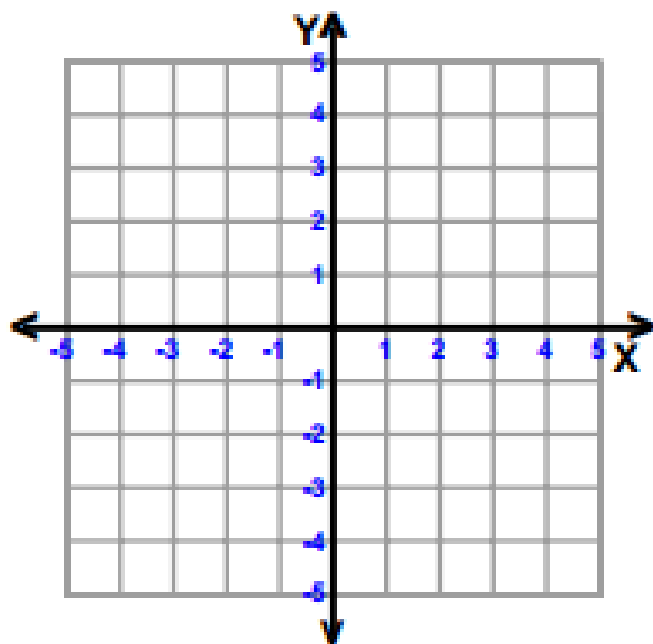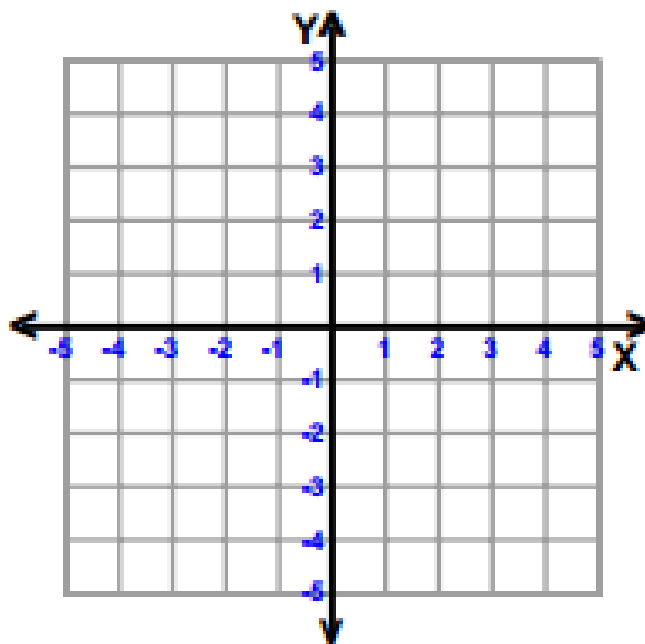
4. $y + 1 \ge -\dfrac{4}{9}(x + 5)$
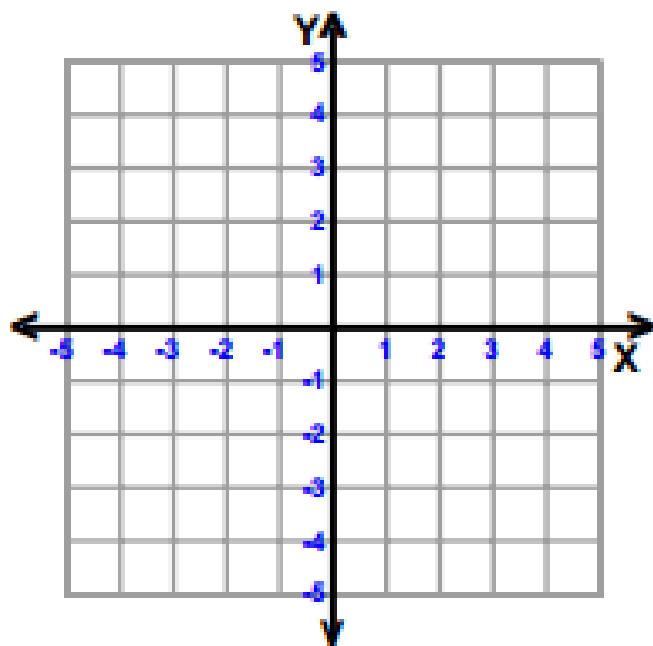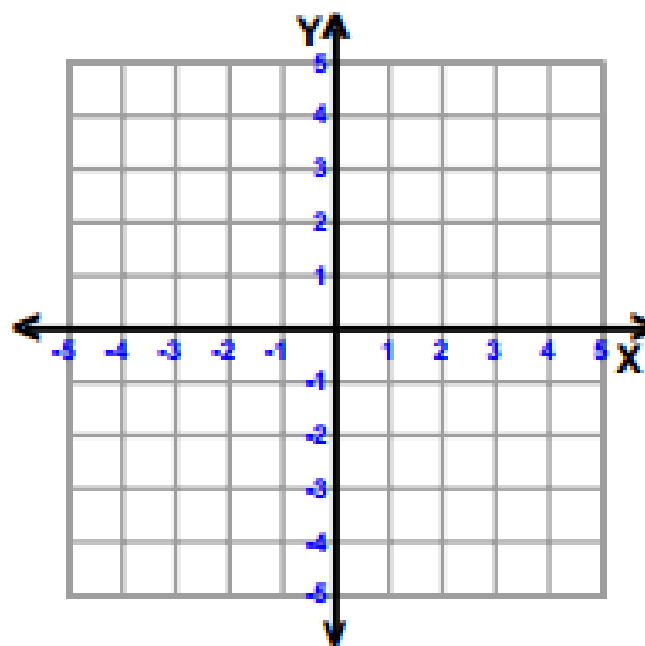
5. $y - 2 > 2(x - 2)$

6. $y - 1 \leq \dfrac{5}{2}(x - 2)$

7. $y - 0 < -5(x + 3)$

8. $y + 4 \geq 3(x + 2)$

Practice – Standard Form of a Linear Equation
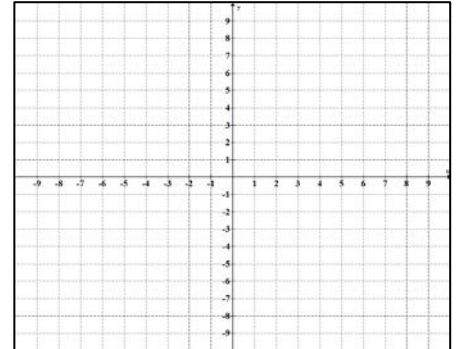
Name _____ **Date** _____ **Period** _____

Using the function in standard form, answer the questions, and graph the function on the plane provided.

1. $2y + 8x = 16$

   $m =$ _____

   y-intercept = _____

   x-intercept = _____
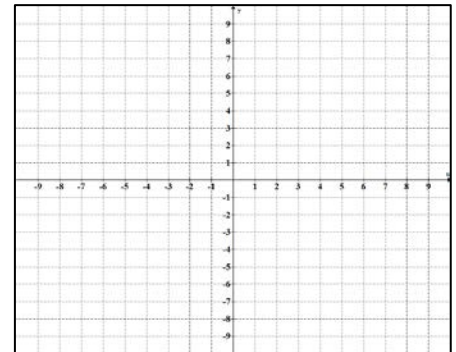
2. $6x - 3y = -18$

   $m =$ _____

   y-intercept = _____

   x-intercept = _____

3. $3x - 4y = 0$

   $m =$ _____

   y-intercept = _____

   x-intercept = _____
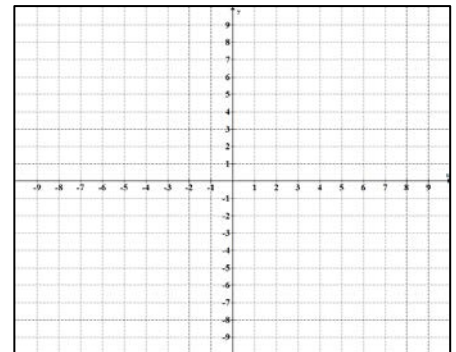
4. What is the equation in standard form of the line that passes through the point (1,5) and has a slope of -2?

A. $2x + y = 7$ B. $2x + y = 11$ C. $2x + y = -7$ D. $x + 5y = -2$

5. What is the equation in standard form of the line that passes through the point (-2,7) and has a rate of change of $\frac{1}{6}$?

A. $-2x - 7y = \frac{1}{6}$ B. $x - 6y = 40$ C. $x - 6y = 44$ D. $x - 6y = -44$

6. The graph shows the distance of an elevator at Chimney Rock, North Carolina, from its destination as a function of time. Use the graph to answer questions a – e. Select the best answer.

North Carolina's Chimney Rock State Park.

a. Which equation does not represent the graph above?

A $y = \dfrac{17}{2}x - 255$

B $17x + 2y = 510$

C $(y - 255) = \dfrac{17}{2}(x - 0)$

D $30x + 255y = 0$

b. What is the x-intercept of this function?

A   0

B   30

C   255

D   300

c. What does the x-intercept represent?

A   The total distance the elevator must travel

B   The number of seconds that passed for any given distance

C   The number of seconds it takes the elevator to reach its destination

D   The distance that the elevator has traveled at any given time

d. What is the y-intercept for this function?

A   0

B   30

C   255

D   300

e. What does the y-intercept represent?

A   The total distance the elevator must travel

B   The number of seconds that have passed for any given distance

C   The number of seconds it takes the elevator to reach its destination

D   The distance that the elevator has traveled at any given time

Algebra 1 Unit 3 – Standard Form of Linear Inequalities

Practice - Standard Form of Linear Inequalities

Name _____ **Date** _____ **Pd** _____

Use the situation below to answer questions 1-4.

An interior decorator is going to remodel a bathroom. The area above the sink, which is $24\,ft^2$, is going to be wall papered. The shower area, which is $12\,ft^2$, is going to be tiled. The owners have a maximum budget of $420.

1. If *x*, is the cost per square foot of wall paper and y, is the cost per square foot of tile, write an inequality that represents this situation. _____

2. Graph the inequality in your calculator. What are three possible prices per square foot for the wallpaper and tiles?

3. What does the point (8.25, 18.5) mean in this project?

4. Explain why this would be important information to know when completing this project.

5. Which equation is represented by the graph below?

A $y + x \geq -3$
B $y - x \geq 3$
C $x - y > -3$
D $y > -x + 3$
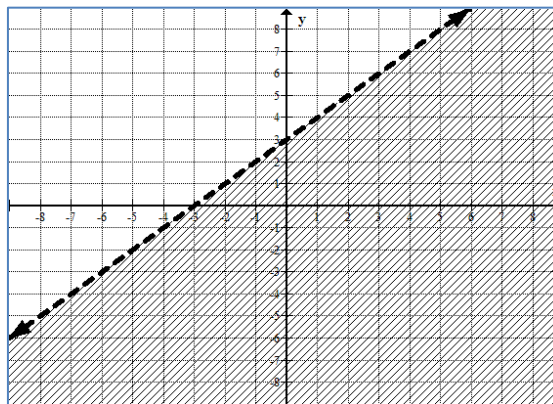
6. Which of the following is a solution to the equation $5x - y < 8$?

    I.   (-2, -9)
    II.   (2, 2)
    III. (-3, 5)
    IV.   (3, -9)

    A II only
    B I, II and III
    C IV only
    D II and III