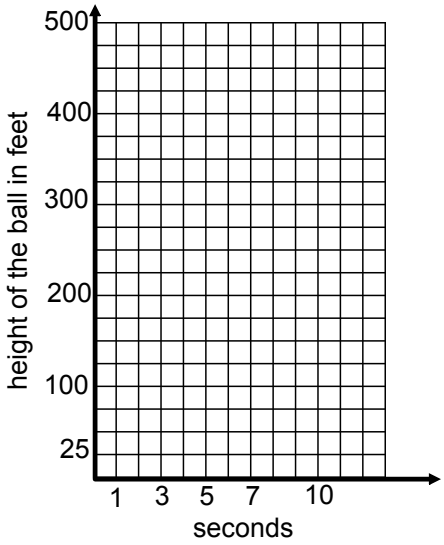
Algebra 1 Week 11 Block Warm Up

1. Skill 5 Fill in the chart and answer the question.

A ball is launched into the air so that the position can be described by $s(t) = 160t - 16t^2$ where s(t) is the position of the ball in feet and t is time in seconds. Use the graph to estimate how long it takes the ball to get to 256 ft (going up and going down)

t	$s(t) = 160t - 16t^2$	s(t)
0		



2. Skill 3: Solve and graph the compound inequality:

$$-4 < 4f + 24 \leq 4$$

Solution:_____

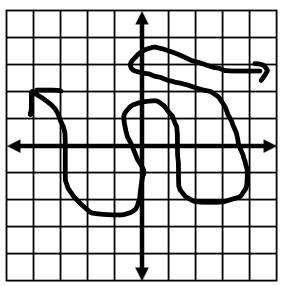
3. Skill 4: Solve and graph the inequality.

$$|3y - 1| \geq 5$$

Solution:_____

Are 4 & 5 functions? Why or why not?

4.



5. $\{(-4,-3),(-2,-2),(0,1),(2,1)\}$

Questions from HW?...all odds.

Algebra 1 Wk 10 Block (Th/F) CW Name_____

Notes for writing an equation of a line through 2 points:

Example 1: Write the equation of a line passing through (2,3) and (6,5).

Step 1: **Find the slope.**

$m = \frac{\_}{\_} = \frac{\_}{\_} = \frac{\_}{\_}$

Step 2: **Substitute** your slope and one point into $y = mx + b$

$(\quad) = (\quad)(\quad) + b$

Step 3: **Solve** for b

Step 4: Write the equation of the line using the slope(m) and y-intercept (b) you found in step 1 and step 3.

$y = (\quad)x + (\quad)$

Example 2: Write the equation of a line passing through (-2,5) and (1, -1)

Step 1:

Step 2:

Step 3:

Step 4:

Example 3: Write the equation of a line passing through (3,2) and (6,1).

Step1:

Step 2:

Step 3:

Step 4:

Notes for writing the equation of a line given a slope and a point.

Example 4: Write the equation of a line passing through (2,3) with slope $= -\frac{1}{2}$

Step 1: **Find the slope.**

We don't have to find the slope, they GAVE it to us!

Step 2: **Substitute** your slope and one point into $y = mx + b$

$(\quad) = (\quad)(\quad) + b$

Step 3: **Solve** for b

Step 4: Write the equation of the line using the slope(m) and y-intercept (b) you found in step 1 and step 3.

$y = (\quad)x + (\quad)$

Example 5: Write the equation of the line with $m = \frac{3}{5}$ that passes through (-10,-8)

Step1:

Step 2:

Step 3:

Step 4:

Example 6: Write the equation of the line with $m = -1$ that passes through (-2,-7)

Step1:

Step 2:

Step 3:

Step 4:

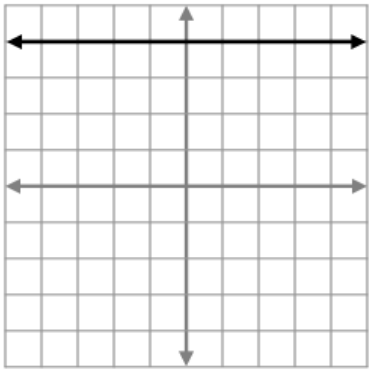
CW

9. $m = 0$, (3, -5)

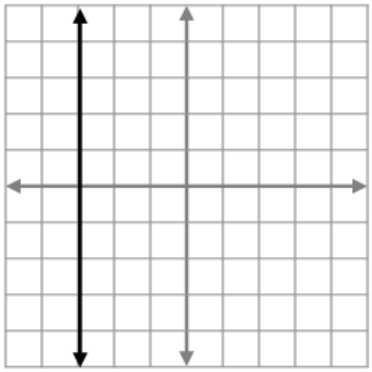
10. $m = undefined$, (-2, -6)

Fill in the blanks for each graph shown.

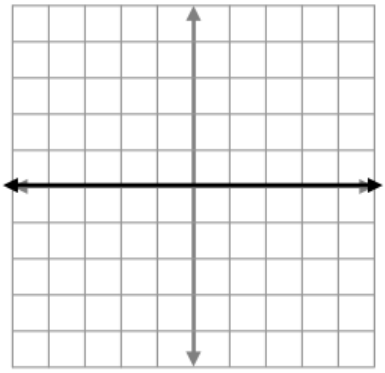
11. Slope: _____
y-intercept: _____
Equation: _____



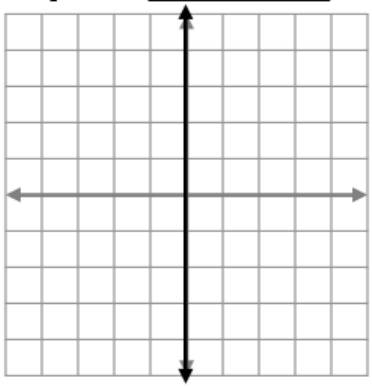
12. Slope: _____
y-intercept: _____
Equation: _____



13. Slope: _____
y-intercept: _____
Equation: _____



14. Slope: _____
y-intercept: _____
Equation: _____



Time for week 11 assessments

Skill test

Quiz

PT

Getting Into Lines Wk 10 Block

Hwk 5.3 A all & 1-9 on wk 11 review wksht

In this activity, you will practice writing the equations of a variety of different lines.

Write the equation of the line that passes through the two given points:

1. (-4, -5) and (8, 4)

2. (-8, 4) and (-4, 1)

3. (6, 0) and (5, -3)

4. (1, 1) and (7, 13)

Sometimes you may be asked to write the equation of a line that passes through a certain point and has a certain slope. This may sound confusing at first, but it is actually easier than writing the equation of a line through two points, because the slope calculation has already been done. (Hint: as you do questions 5-6, compare your work to questions 1-2.)

Given the slope and a point on the line, write the equation.

5. $m = \frac{3}{4}$, (8, 4)

6. $m = -\frac{3}{4}$, (-4, 1)

7. $m = -3$, (-1, -6)

8. $m = \frac{1}{2}$, (6, 3)

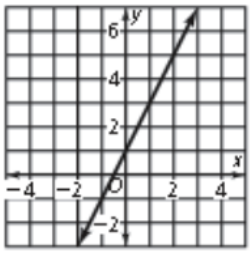
Algebra 1 Wk 11 Block HW Wk 11 Review Wksht Show all work Name_____

1. Determine if the rate of change is constant, if it is, find the rate of change (slope). Then explain what it means

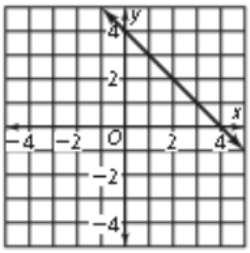
Miles Per Gallon

Gallons	Miles
1	28
3	84
5	140
7	196

2. **Find the slope of each line**



3. Find the slope of the line



4. **Find the slope of the line that passes through each pair of points**

(1, 0), (–4, 2)

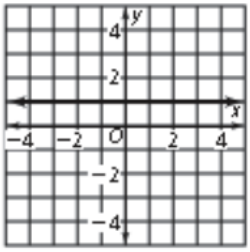
5. **Find the slope of the line that passes through each pair of points**

(8, –4), (–6, –3)

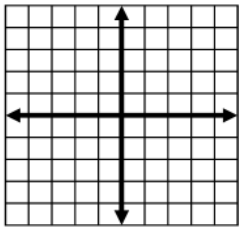
6. **Find the slope of the line that passes through each pair of points**

(–2, –3), (6, 5)

7. **Find the slope of the line.**



8. **Draw in a line with undefined slope.**



9. Each pair of points lies on the same line. Find x.

(x, 5), (–3, 6); slope = –1