

# Unit 2 HW 4

Name \_\_\_\_\_

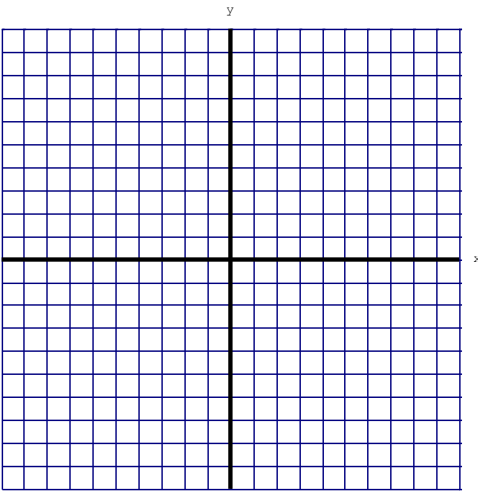
Date \_\_\_\_\_ Period \_\_\_\_\_

## Graph the equations.

1.  $5x - 2y = 12$

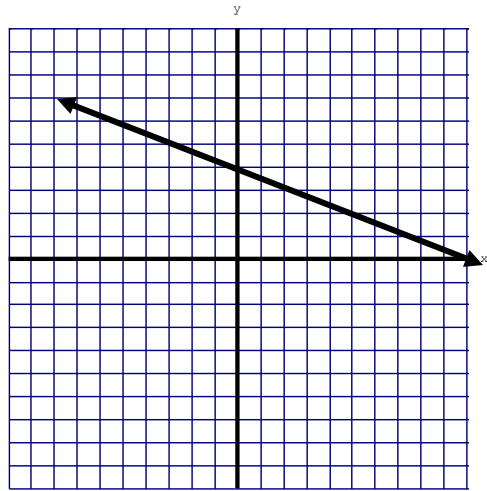
Slope - Intercept Equation: \_\_\_\_\_

$m =$                        $b =$



## Given the graph, write the equation.

2.



$m =$                        $b =$

Equation: \_\_\_\_\_

## 3. Write an equation given the following information:

a.  $m = -6$  and passes thru  $(3, -11)$

b. passes thru  $(-4, 10)$  and  $(1, 14)$

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4. Mr. Sacco's beard grows at a rate of 1mm per 5 days. (1 in = 2.54 cm and 1 cm = 10 mm)

a) convert this rate into inches/day

b) convert this rate into feet/year

5. Match the equation or inequality to the correct situation by writing the letter next to the word problem.

a.  $2x + 115 = 142$

b.  $2x - 142 \geq 115$

c.  $142 - 2x < 115$

- After spending \$142 on supplies, I'm going to sell my cookies for \$2 each and hope to make at least \$115 \_\_\_\_
- I get \$2 for each car I wash. I had \$115 before I started and now I have \$142. \_\_\_\_
- I am trying to get under 115 pounds. I weigh 142 pounds now and I think I can lose 2 pounds per week. \_\_\_\_

6. Solve the inequality.

$$\frac{15 - 4x}{5} < 9$$

7. Solve.

$$\frac{7 - 2x}{4x} = \frac{6}{8}$$

8. Simplify.

$$-28 + 4(-2)^2 - 10(-3) + (-5)^2$$