Geometry H **NAME:**_____
Mrs. Diaz **DATE:**_____

ASSIGNMENT #6 **Slope Intercept Form Overview**

OBJECTIVE: <u>S.W.B.A.T. identify parallel and perpendicular slopes as well as graph linear equations.</u>

Write the equation of the line that passes through the given y-intercept and given slope.

1. m = 3, b = -3

2. $m = \frac{6}{7}$, b = 15

State the negative reciprocal of the given slope.

1. $m = \frac{1}{4}$ ☐

2. m = –6 ☐

3. $m = -\frac{2}{3}$ ☐

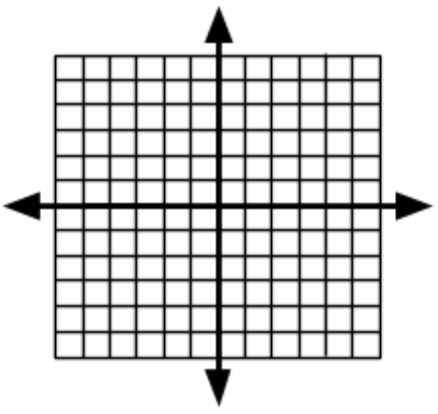
4. m = 9 ☐

Write the equation of the line that passes through the given point and given slope.

3. Passes through (2, 3) and slope is 5.

4. Passes through (6, -5) and slope is $-\frac{1}{3}$

5. Passes through (5, -2) and slope is 0.

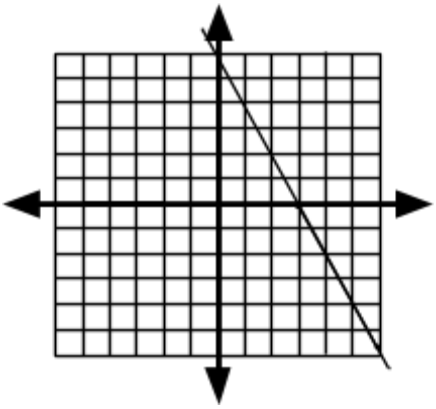


Remember: You can always check the b by graphing. Plot the point and move by counting the slope till you cross the y-axis.

Write the equation of a line given two points.

6. Passes through (4, -3) and (3, -6)

7.



Write the equation of a line given two points and must be parallel or perpendicular to another line.

8. Passes through (3, 2)

Parallel to $y = -\frac{1}{3}x - 1$

9. Passes through (4, 0)

Perpendicular to 2x + y = 1

Are these equations parallel, perpendicular, or neither?

10. *l:* $y = \frac{1}{3}x - 2$ *h:* $6y = 2x + 12$

11. *q:* $4x - 2y = 6$ *w:* $2x + 4y = 6$

12. Which lines are //? Which are ⊥? A graph may help.

x = 4
y = –4
y = 4x