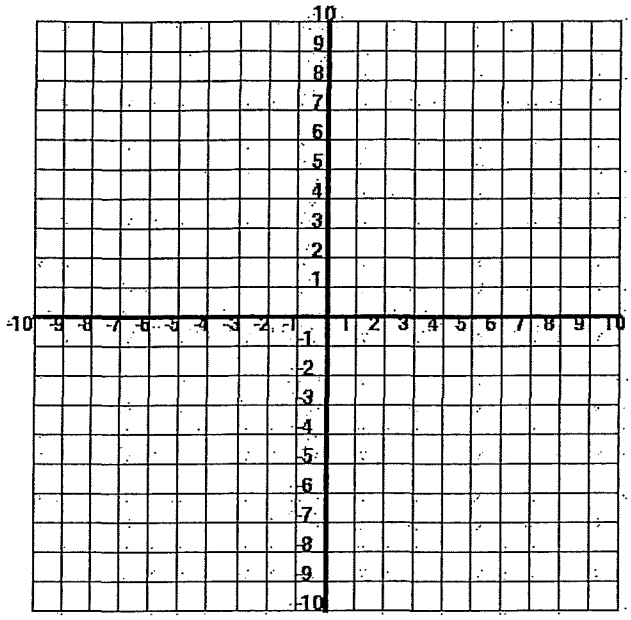
Date: _____

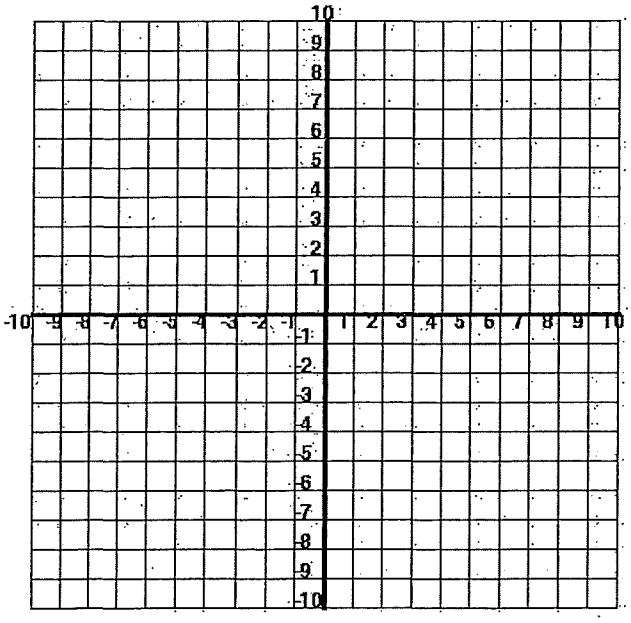
5.5: Slopes of Special Lines and Equations of Lines

1. Graph the following points and calculate the slope.

a) E(3, 3) F(3, 8)



b) G(-6, -4) H(8, -4)



c) A(-5, 6) B(-5, -2)

d) C(5, -3) D(-4, -3)

Equation of a line

_____ is the equation of a line in _____ form.

"m" represents

"b" represents

How do you find *m* and *b*?

*1) b*is _____.

2) Calculate slope using _____

3) Once you have the two components, _____.

4) x-intercept is where the line crosses the _____. To find this, we set _____, find the spot on the graph where the line passes through the _____.

Interpreting the Slope Y-Intercept Form of a Line

Fill in the chart below:

slope (↓ m) y-intercept (with its sign!) (↓ b)

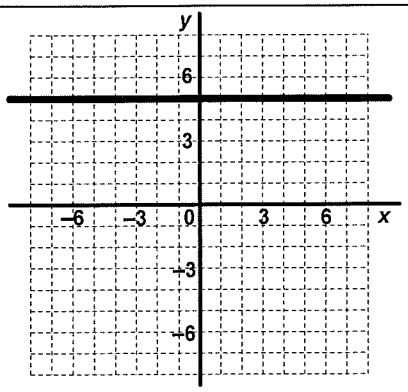
$$y = mx + b$$

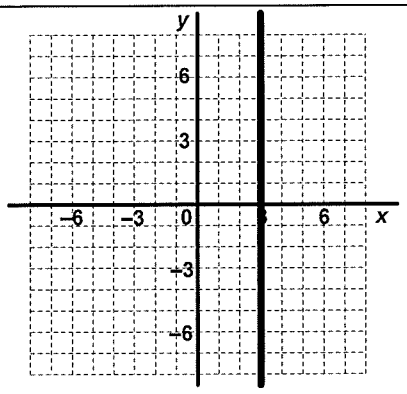
	EQUATION	SLOPE	Y-INTERCEPT	DIRECTION
1.	$y = 6x + 13$			
2.	$y = -4x + 9$			
3.	$y = -7x - 5$			
4.	$y = x - 2$			
5.	$y = \frac{3}{2}x + 10$			
6.	$y = \frac{4}{5}x - 7$			
7.	$y = -x + \frac{9}{4}$			
8.	$y = 8.3x$			
9.	$y = \frac{5x}{11} - 3.7$			
10.	$y = 11$			
11.	$y = 6 - \frac{x}{7}$			
12.	$y = -8 + \frac{2x}{3}$			

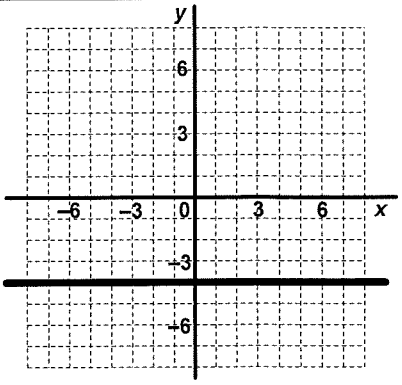
Mathematics 9

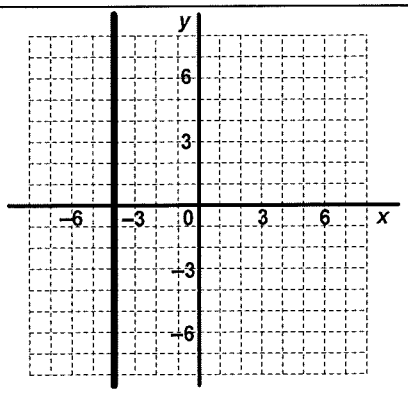
Special Graphs Are Easy!

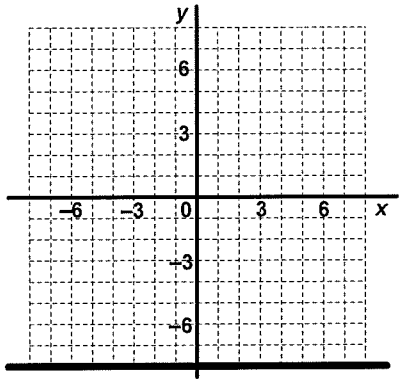
Date:

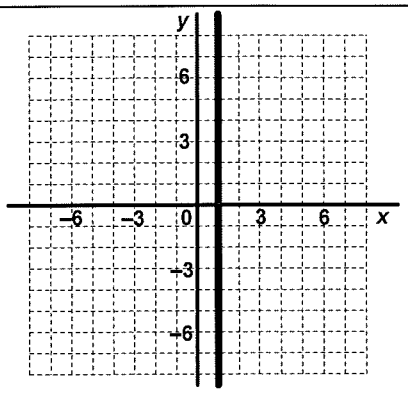
1. 

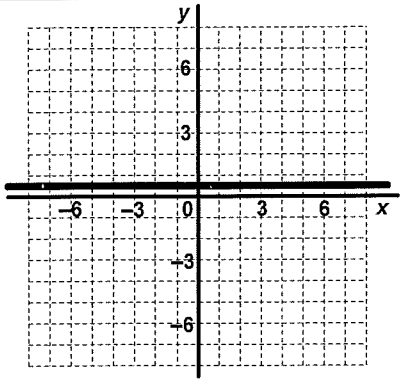
2. 

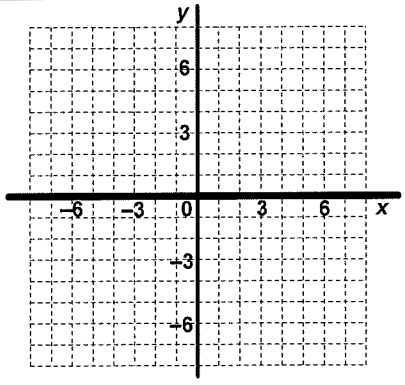
3. 

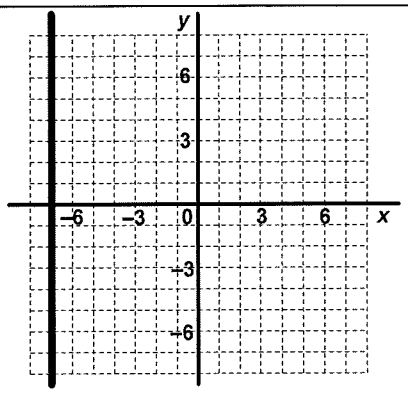
4. 

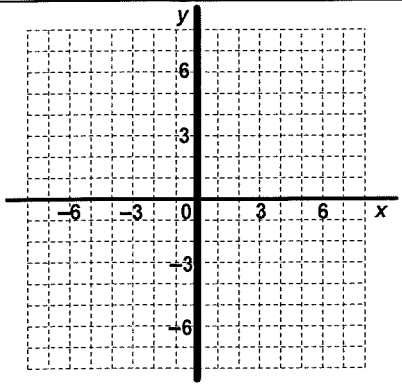
5. 

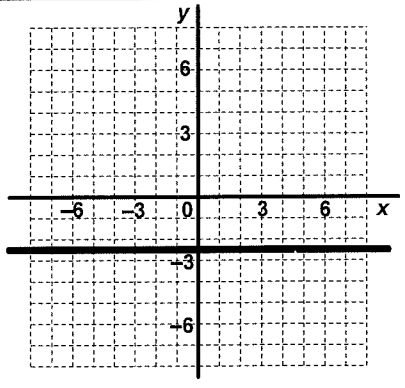
6. 

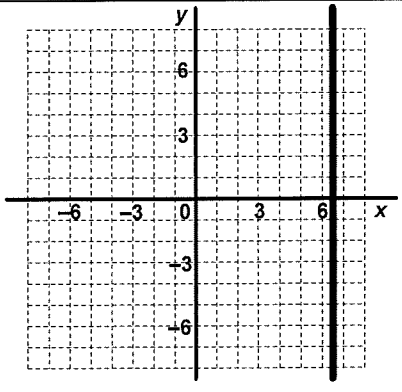
7. 

8. 

9. 

10. 

11. 

12. 

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