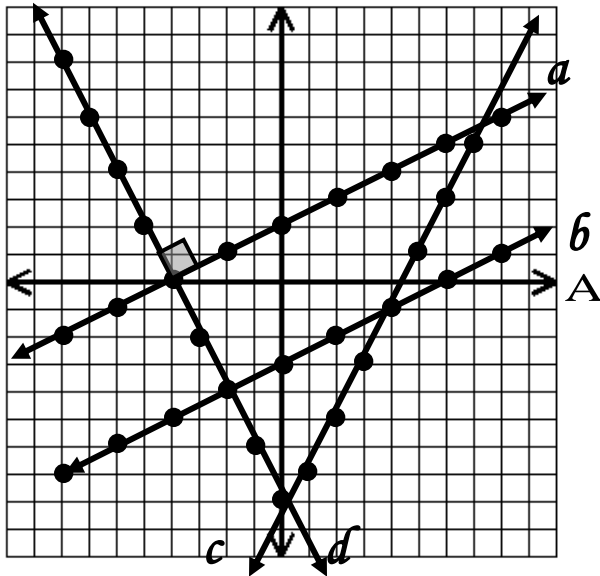


## PARALLEL & PERPENDICULAR LINES – Day 1

Use the graph below to find the slope of each line.



<i>line</i>	<i>slope</i>	<i>equation</i>
<i>a</i>		
<i>b</i>		
<i>c</i>		
<i>d</i>		

Which lines are parallel?

What do you notice about their slopes?

Which lines are perpendicular?

What do you notice about their slopes?

**EXAMPLES:** Fill in the chart.

GIVEN SLOPE	PARALLEL SLOPE	PERPENDICULAR SLOPE
$\frac{2}{3}$		
-4		
$-\frac{1}{4}$		
2		
0		

**EXAMPLES:** Determine if the given lines are parallel, perpendicular, or neither.

1) _____	$y = -\frac{1}{2}x + 4$ and $y = 2x - 8$
2) _____	$y = 3x + 7$ and $y = -3x + 2$
3) _____	$y = \frac{x}{7} - 6$ and $y = \frac{1}{7}x$

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4. Write the equation, in slope-intercept form, of a line that passes through the given point and is **PARALLEL** to the graph of the given equation.

(2, 9);  $y = \frac{5}{2}x - 4$

5. Write the equation, in slope-intercept form, of a line that passes through the given point and is **PERPENDICULAR** to the graph of the given equation.

(6, -13);  $y = \frac{2}{9}x - 5$