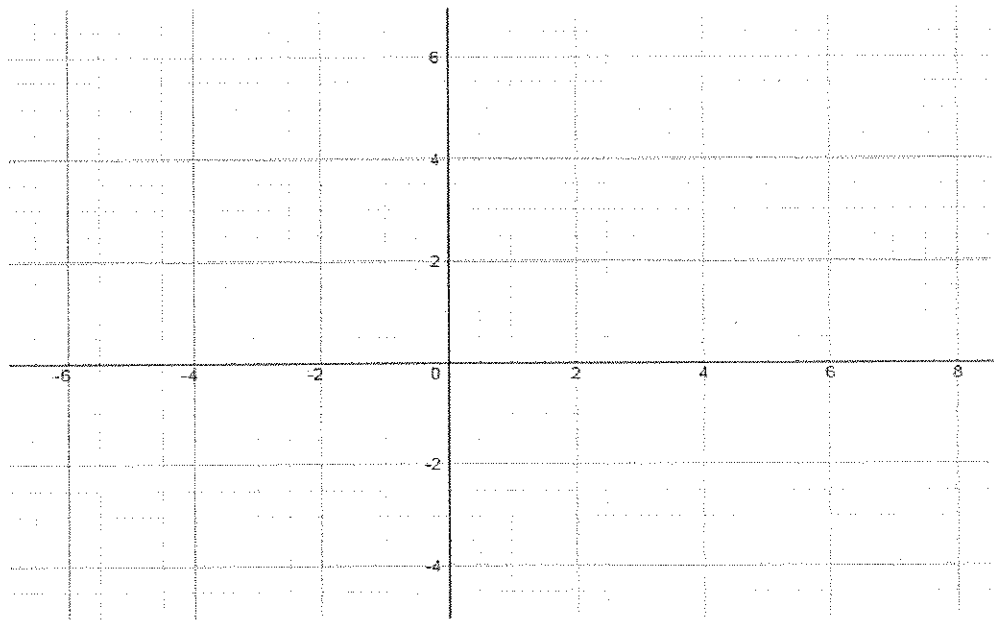


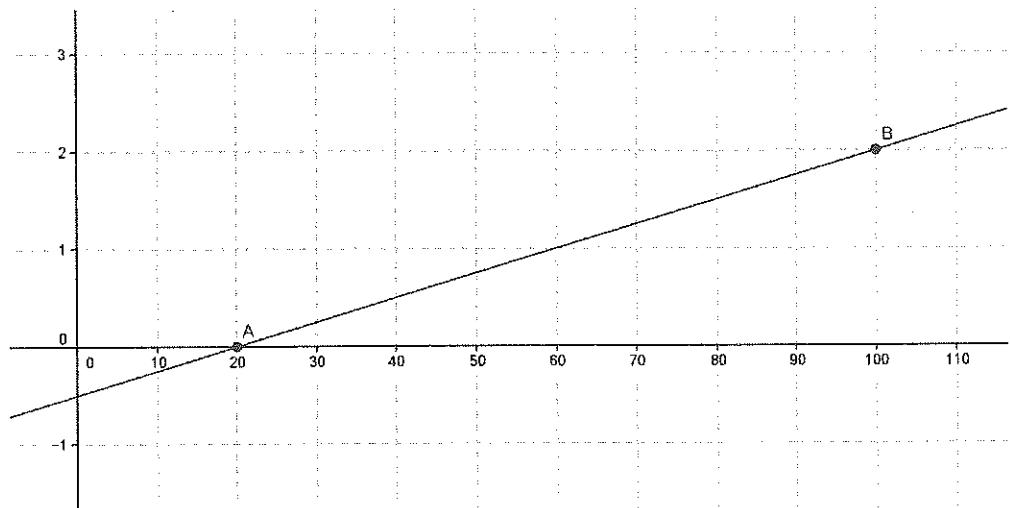
## Linear Equations: Six Essential Skills

	Pre	Goal	Post
1. Graph a line from an equation in slope-intercept form.			
2. Determine slope from a graphed line, interpreting scale.			
3. Determine slope from two points.			
4. Write the equation of a line from one point and the slope.			
5. Write the equation of a line from two points.			
6. Rearrange an equation from standard form to slope-intercept form, and vice versa.			

1. Graph  $y = -\frac{1}{3}x + 2$



2. Find the slope:



3. Find the slope from  $(-10, 8)$  to  $(11, -3)$ .

4. Write an equation of the line through  $(3,9)$  with slope  $-1/2$ .

5. Write an equation of the line through  $(-10, 8)$  and  $(11, -3)$ .

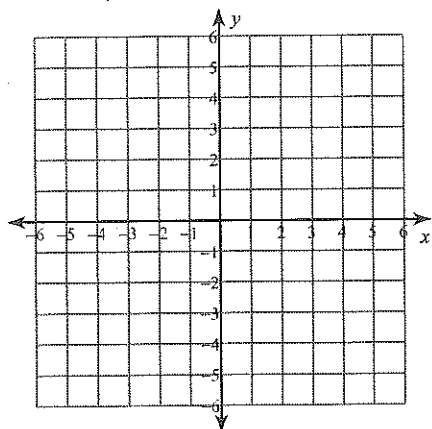
5. Write an equation of the line in part 2.

6. Rearrange to slope-intercept form:  $3x - 6y = -8$ .

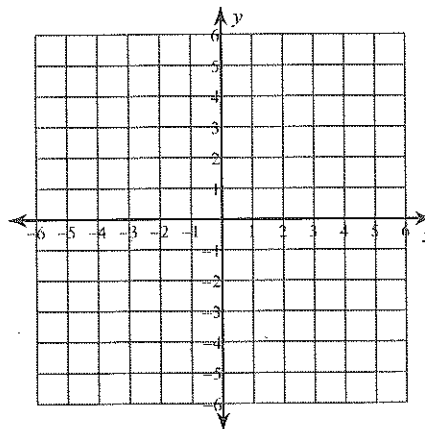
## Graphing Lines

Sketch the graph of each line.

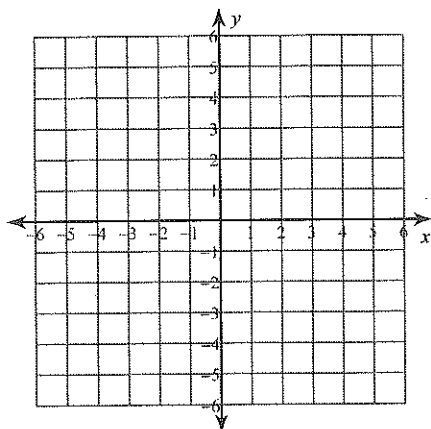
1)  $y = \frac{7}{2}x - 2$



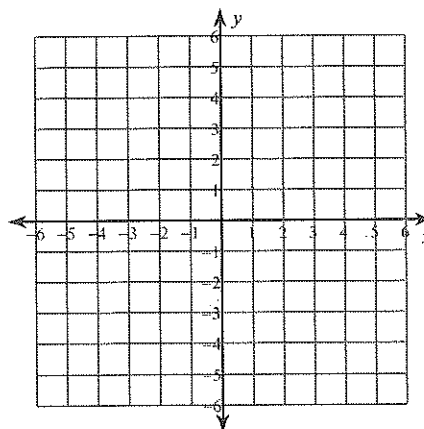
2)  $y = -6x + 3$



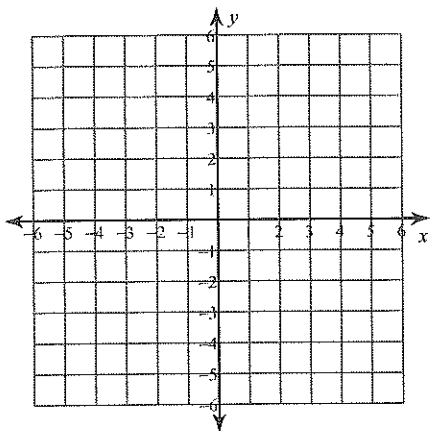
3)  $y = -5$



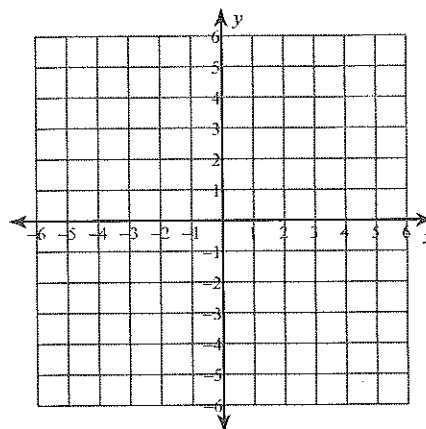
4)  $y = \frac{6}{5}x + 1$



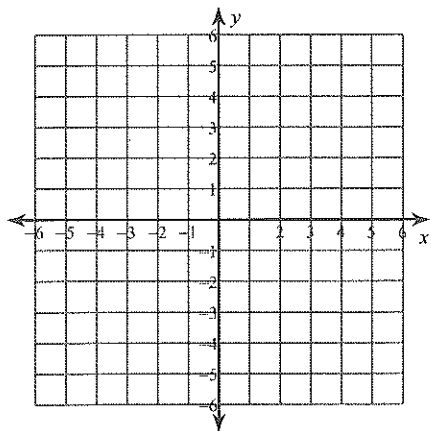
5)  $y = \frac{1}{4}x + 2$



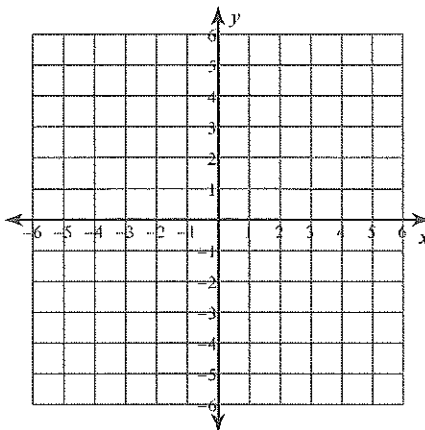
6)  $x = 5$



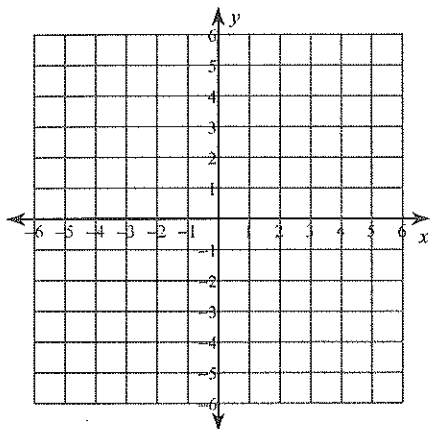
7)  $y = \frac{5}{3}x$



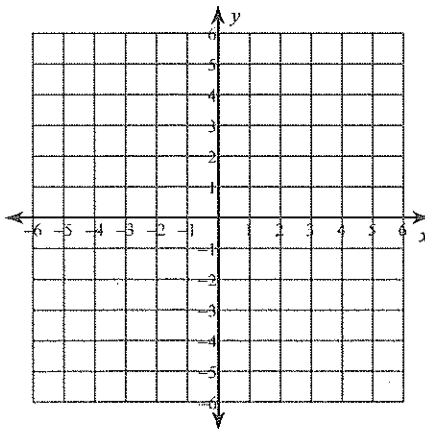
8)  $x = 0$



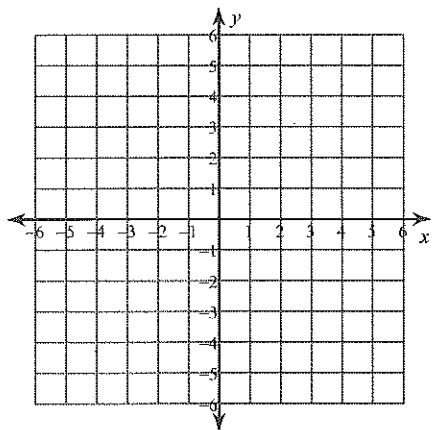
9)  $y = -\frac{1}{3}x + 3$



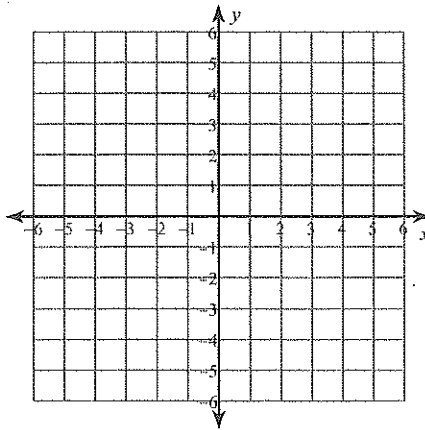
10)  $y = \frac{1}{5}x - 4$



11)  $y = \frac{1}{2}x - 2$



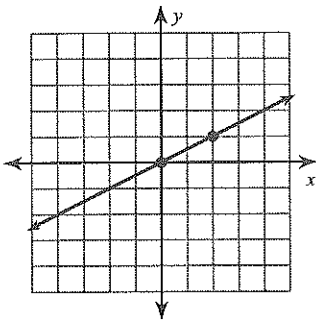
12)  $y = 2x + 5$



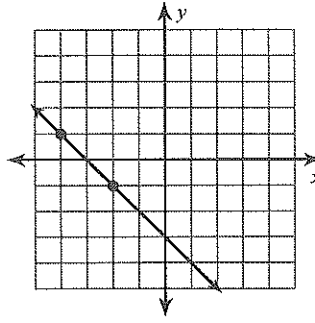
# Finding Slope From a Graph

Find the slope of each line.

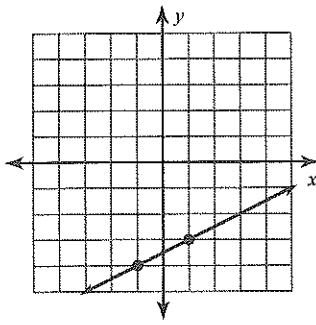
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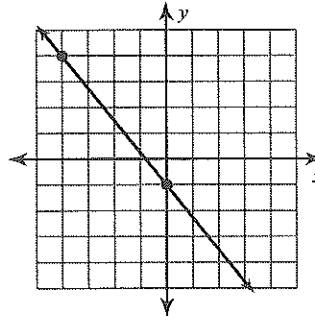
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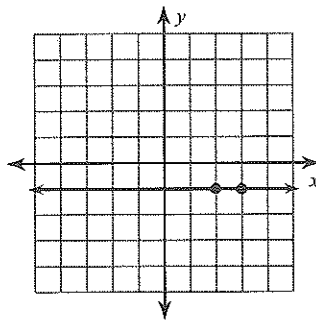
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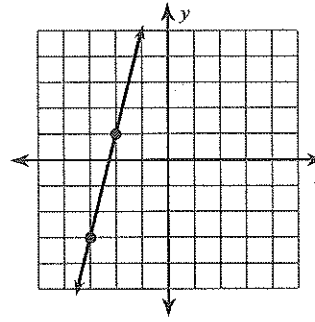
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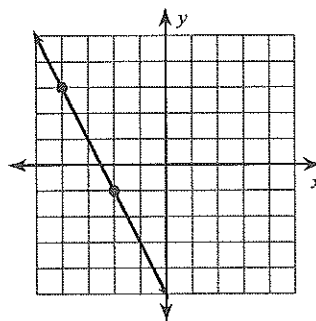
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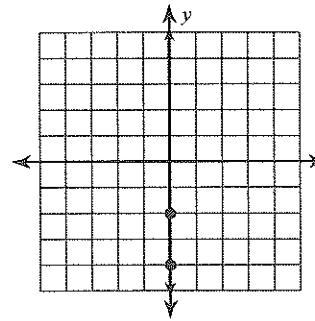
6)



7)

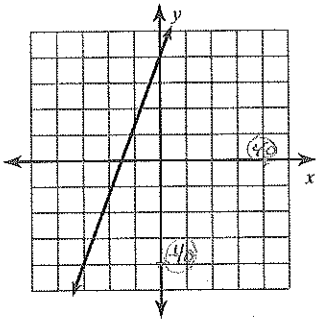


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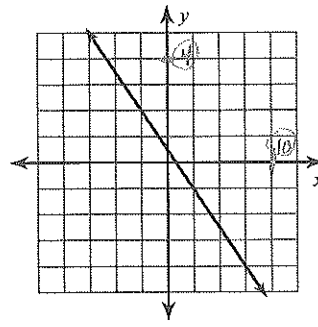


SCALE!

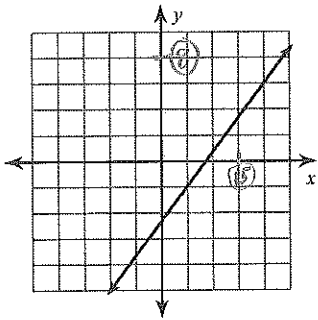
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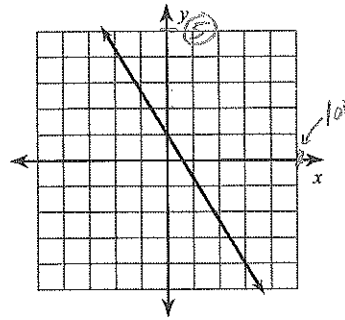
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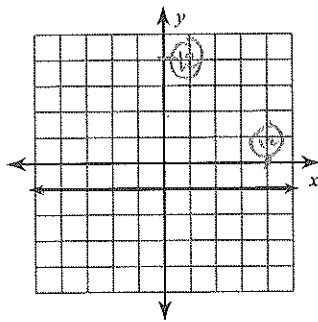
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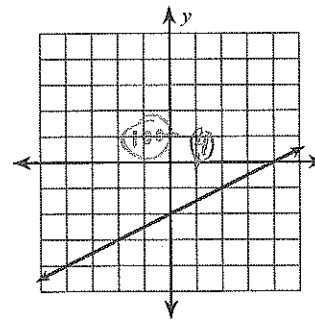
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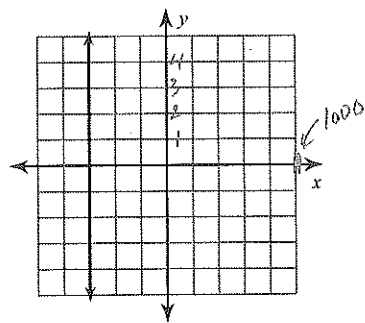
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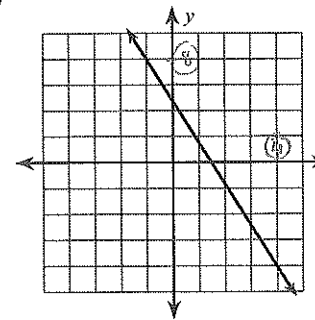
14)



15)



16)



## Finding Slope From Two Points

Find the slope of the line through each pair of points.

1)  $(19, -16), (-7, -15)$

2)  $(1, -19), (-2, -7)$

3)  $(-4, 7), (-6, -4)$

4)  $(20, 8), (9, 16)$

5)  $(17, -13), (17, 8)$

6)  $(19, 3), (20, 3)$

7)  $(3, 0), (-11, -15)$

8)  $(19, -2), (-11, 10)$

**Writing Equations given two points**

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**Write the slope-intercept form of the equation of each line given the slope and y-intercept.**

1) Slope = 4, y-intercept = 3

2) Slope = -1, y-intercept = 1

**Write the slope-intercept form of the equation of the line through the given point with the given slope.**

3) through:  $(5, 1)$ , slope =  $-\frac{2}{5}$

4) through:  $(2, -4)$ , slope =  $-\frac{7}{2}$

**Write the slope-intercept form of the equation of the line through the given points.**

5) through:  $(2, 0)$  and  $(4, 4)$

6) through:  $(0, -4)$  and  $(-3, -1)$

7) through:  $(1, 3)$  and  $(0, -4)$

8) through:  $(2, 3)$  and  $(0, -3)$

9) through:  $(0, 4)$  and  $(-5, 0)$

10) through:  $(0, 4)$  and  $(-5, 5)$

11) through:  $(0, -3)$  and  $(-5, -5)$

12) through:  $(0, 5)$  and  $(4, -4)$

13) through:  $(3, 4)$  and  $(0, -2)$

14) through:  $(0, -1)$  and  $(-4, 5)$