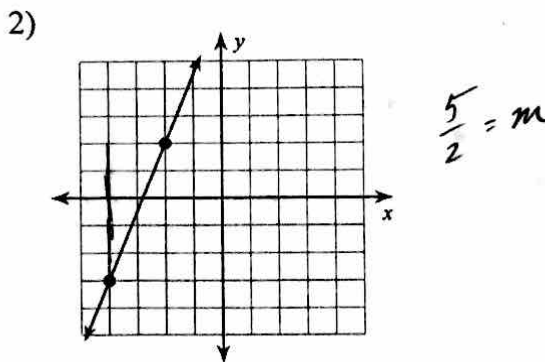
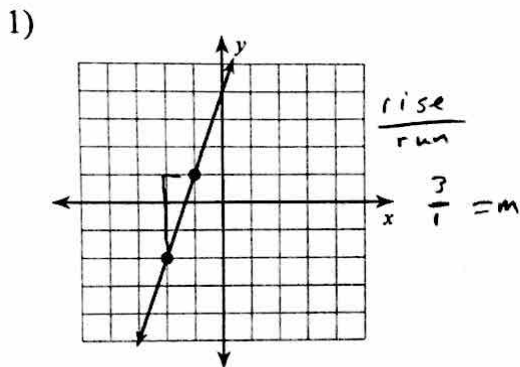


HW204 - Linear Equations

Find the slope of each line.



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

3)  $(-3, -10), (-3, 6)$   $m = \frac{6 - (-10)}{-3 - (-3)} = \frac{16}{0} =$   
 $m = \text{undefined}$

4)  $(-7, 16), (0, -2)$   $m = \frac{-2 - 16}{0 - (-7)} = \frac{-18}{7}$

Find the slope of each line.

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

6)  $3x + 2y = -8$   
 $\frac{2y}{2} = \frac{-3x - 8}{2}$   
 $y = -\frac{3}{2}x - 4$   
 $m = -\frac{3}{2}$

Find the slope of a line parallel to each given line.

7)  $0 = -7x + 2y - 10$   
 $2y = 7x + 10$   
 $y = \frac{7}{2}x + 5$   
 $m = \frac{7}{2}$

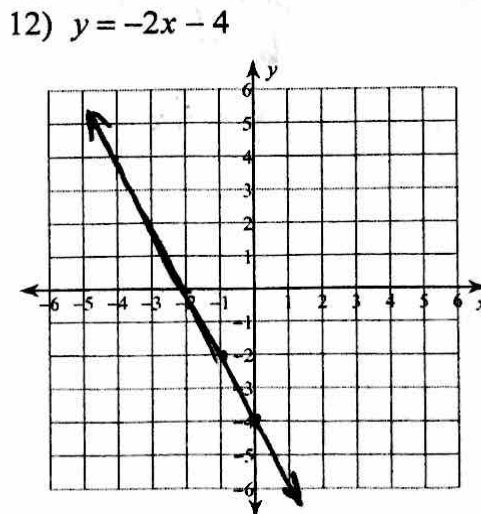
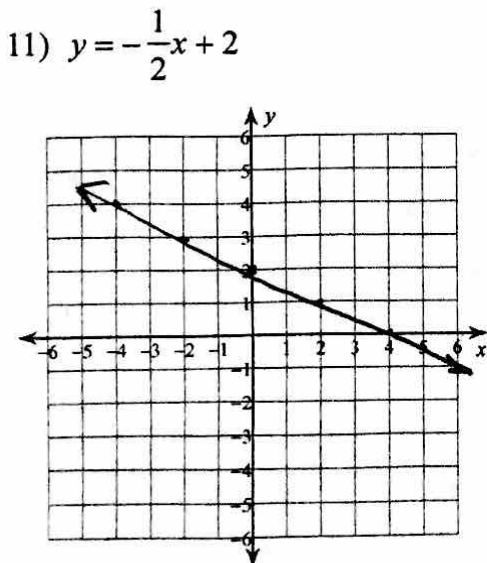
8)  $6 = 3x$   $m = \text{undefined}$

Find the slope of a line perpendicular to each given line.

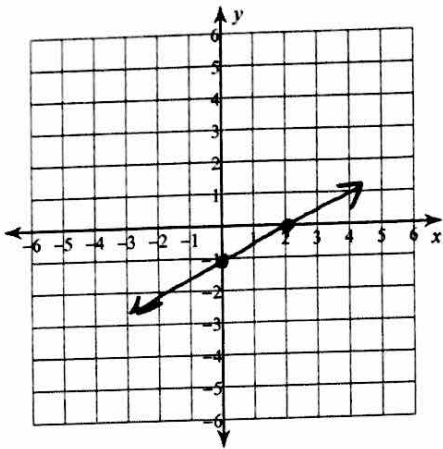
9)  $x = 2y$   $y = \frac{1}{2}x$   
 $m = \frac{1}{2}$   $\perp m = -2$

10)  $-9 = 3y - x$   
 $\frac{3y}{3} = \frac{x - 9}{3}$   
 $y = \frac{1}{3}x - 3$   
 $m = \frac{1}{3}$   $\perp m = -3$

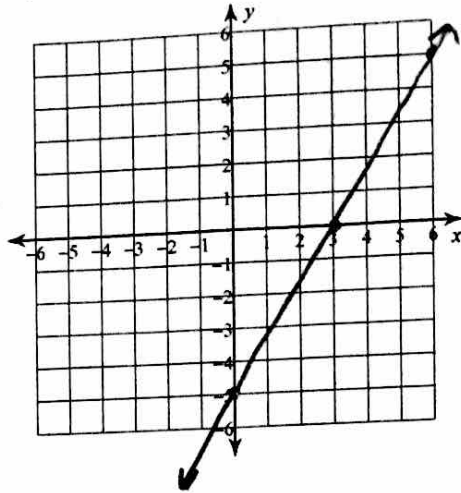
Sketch the graph of each line.



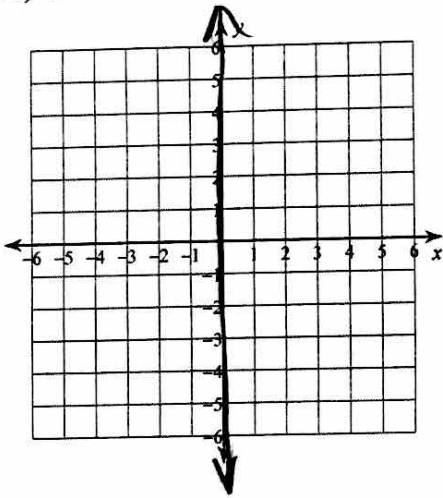
13) x-intercept = 2, y-intercept = -1



14) x-intercept = 3, y-intercept = -5



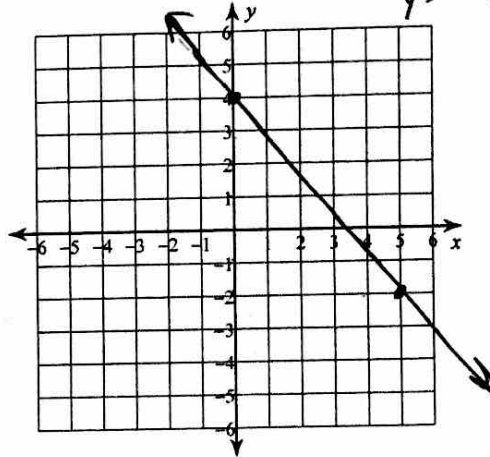
15)  $x = 0$



16)  $6x + 5y = 20$

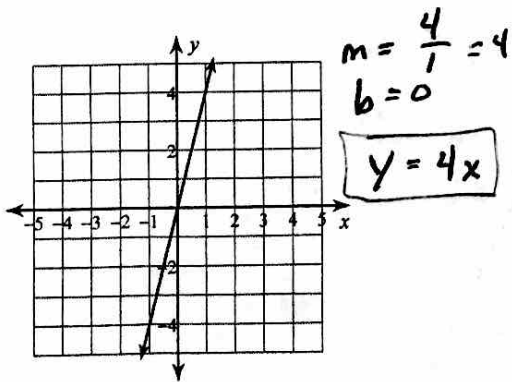
$$5y = -6x + 20$$

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

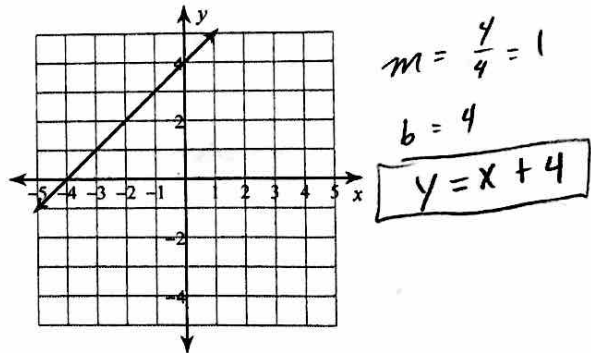


Write the slope-intercept form of the equation of each line.

17)



18)



19)  $x - 3y = 18$

$$\frac{-3y}{-3} = \frac{-x + 18}{-3}$$

$$y = \frac{1}{3}x - 6$$

20)  $y - 1 = -(x - 1)$

$$y - 1 = -x + 1$$

$$y = -x + 2$$