SRHS Math 1 - Assignment #5.1B

Name_____

Solve the equation.

1) $\frac{x}{3} = 7$

$\{21\}$

2) $2x - 2x = 0$

{ All real numbers. }

3) $22 = -5 + 4b + 5b$

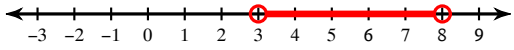
$\{3\}$

4) $5|k - 4| = 35$

$\{11, -3\}$

Solve the inequality and graph its solution.

5) $-55 < -6n - 7 < -25$



$3 < n < 8$

Solve as directed.

6) Evaluate $f(x) = 5x - 11$ when $x = 8$

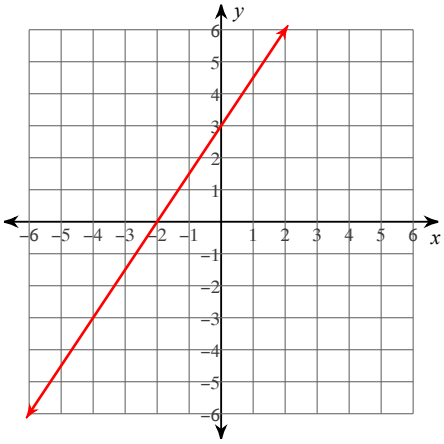
29

7) For $f(x) = 4x + 3$, find the value of x for which $f(x) = 31$

7

Sketch the graph of the linear function using the given intercepts.

8) x-intercept = −2, y-intercept = 3



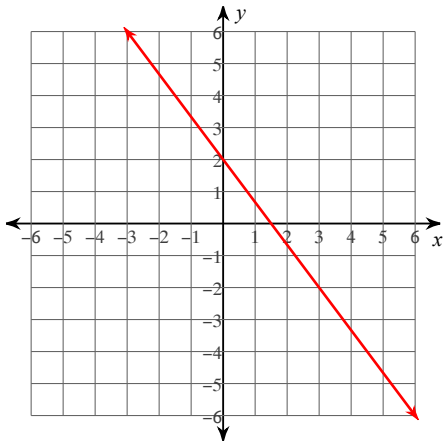
Find the x and y intercepts of the given function.

9) $3x - 12y = 18$

x - int: (6, 0) and y-int: $(0, -\frac{3}{2})$

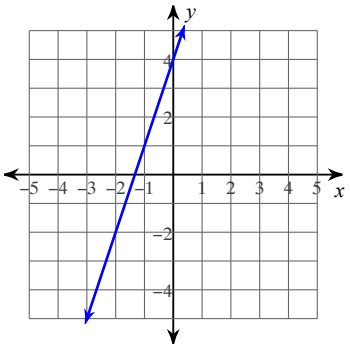
Sketch the graph of the line.

10) $y = -\frac{4}{3}x + 2$



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

11)



$y = 3x + 4$

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

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

$y + 1 = \frac{3}{5}(x + 5)$

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

13) through: $(-5, 5)$ and $(-1, 2)$

$y - 5 = -\frac{3}{4}(x + 5)$ or $y - 2 = -\frac{3}{4}(x + 1)$

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

14) through: $(-4, -5)$ and $(-2, -1)$

$y = 2x + 3$

Write an equation of the line...

15) through: $(-4, 5)$, parallel to $y = -\frac{5}{4}x + 1$

$y = -\frac{5}{4}x$ or $y - 5 = -\frac{5}{4}(x + 4)$

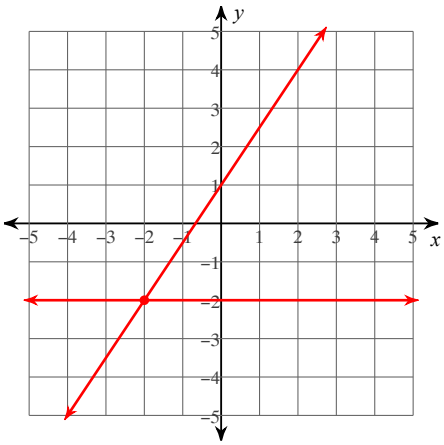
16) through: $(2, -5)$ and perpendicular to $y = \frac{1}{3}x - 2$

$y = -3x + 1$ or $y + 5 = -3(x - 2)$

Solve each system by graphing.

17) $y = \frac{3}{2}x + 1$

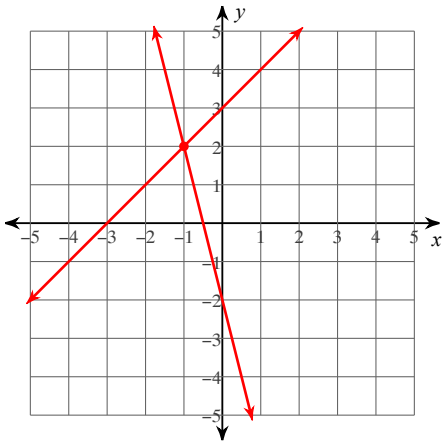
$y = -2$



$(-2, -2)$

18) $y = -4x - 2$

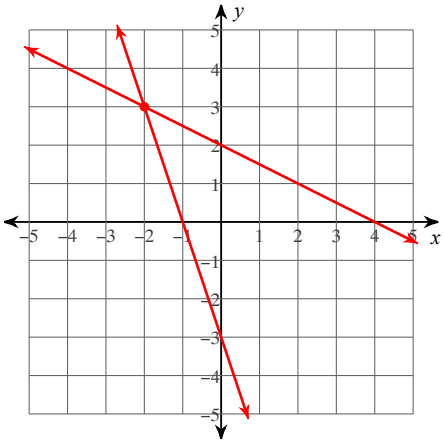
$y = x + 3$



$(-1, 2)$

19) $x + 2y = 4$

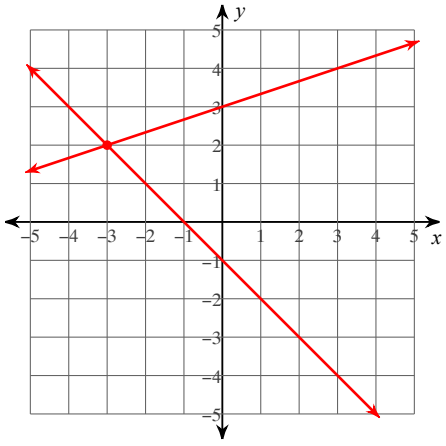
$3x + y = -3$



$(-2, 3)$

20) $x - 3y = -9$

$x + y = -1$



$(-3, 2)$