

Solve the equation.

1) $\frac{k}{5} = 7$ {35}

2) $8k - 8k = 0$ { All real numbers. }

3) $-4v - 2v = 12$ {-2}

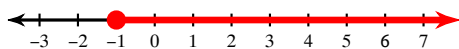
4) $|m + 7| + 10 = 16$ {-1, -13}

Write an equation or inequality for the statement

5) A number cubed is greater than the number squared $x^3 > x^2$

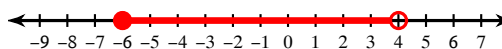
Solve the inequality and graph its solution.

6) $-2x - 4x \leq 6$



$x \geq -1$

7) $-4 < -3r + 8 \leq 26$

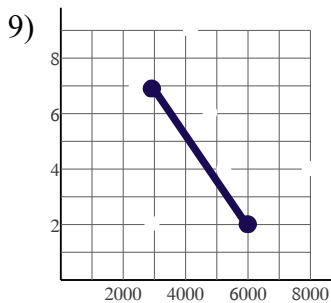


$-6 \leq r < 4$

Determine if the relation is a function. State 'yes' or 'no' and explain.

8) (2, 8), (4, 8), (5, 8), (7, 8), (9, 8), (10, 8) Yes. Each input is paired with exactly one output.

State the domain and range of the relation.



Domain: $3000 \leq x \leq 6000$
 Range: $2 \leq y \leq 7$

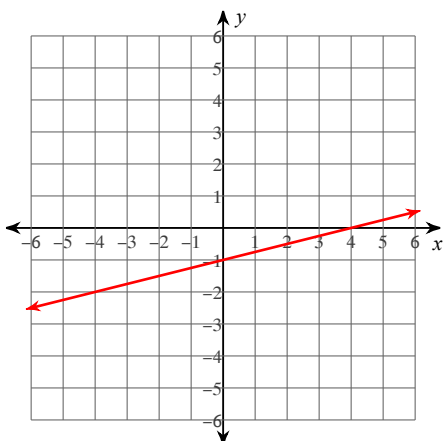
Solve as directed.

10) Evaluate $f(x) = -3x + 8$ when $x = 10$ -22

11) For $f(x) = 14x - 3$, find the value of x for which $f(x) = 25$ 2

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

12) x -intercept = 4, y -intercept = -1



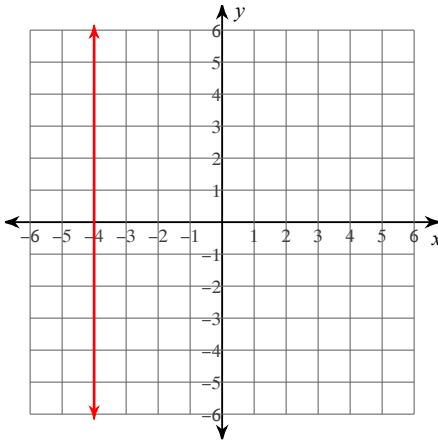
Find the x and y intercepts of the given function.

13) $2x - 5y = 10$

x - int: (5, 0) and y-int: (0, -2)

Sketch the graph of the line.

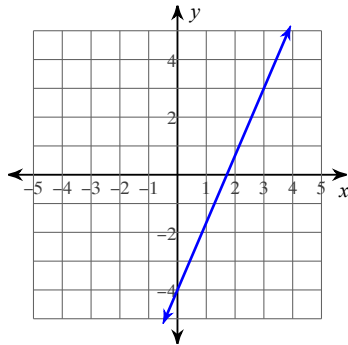
14) $x = -4$



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

15)

$$y = \frac{7}{3}x - 4$$



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

16) through: (1, -3), slope = -2

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

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

17) through: (3, 1) and (-5, -2) $y - 1 = \frac{3}{8}(x - 3)$ or $y + 2 = \frac{3}{8}(x + 5)$

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

18) through: (3, -1) and (2, -5)

$$y = 4x - 13$$

Write an equation of the line...

19) through: (-3, -5) and parallel to $y = 7x + 5$

$$y = 7x + 16 \text{ or } y + 5 = 7(x + 3)$$

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