

I. Solve each equation.

1) $x - 20 = -23$ $\{-3\}$

II. Solve each equation.

2) $3x + 6 - 3x = 6$ $\{\text{All real numbers.}\}$

III. Solve each equation.

3) $3k + 4 = 14 + 7k - 2k$ $\{-5\}$

IV. Solve each equation.

4) $4 + 2m = -6m + 2(m + 2)$ $\{0\}$

V. Solve each equation.

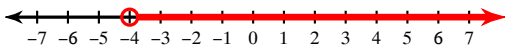
5) $-5p + 6p = 2$ $\{2\}$

VI. Solve each equation.

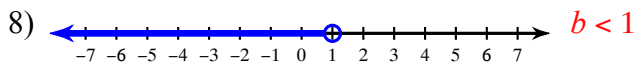
6) $|6 + r| + 7 = 18$ $\{5, -17\}$

VII. Draw a graph for each inequality.

7) $n > -4$



VIII. Write an inequality for each graph.

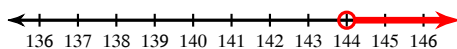


IX. Write an equation or inequality for each.

9) Six more than a number x is greater than seven less than a number x $x + 6 > x - 7$

X. Solve each inequality and graph its solution.

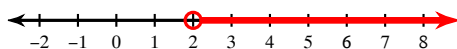
10) $12 < \frac{b}{12}$



$b > 144$

XI. Solve each inequality and graph its solution.

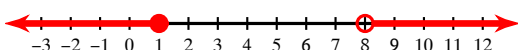
11) $6 < -2n + 5n$



$n > 2$

XII. Solve each compound inequality and graph its solution.

12) $2 + x > 10$ or $4x - 5 \leq -1$

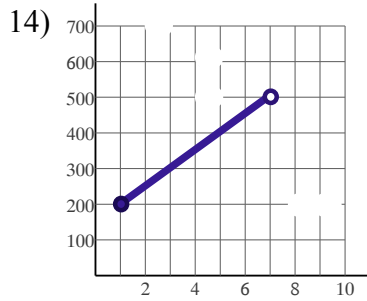


$x > 8$ or $x \leq 1$

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

13) $(2, 8), (4, 5), (4, 6), (7, 8), (9, 11), (10, 0)$ **No.**

XIV. State the domain and range of the relation.



Domain: $1 \leq x < 7$
Range: $200 \leq y < 500$

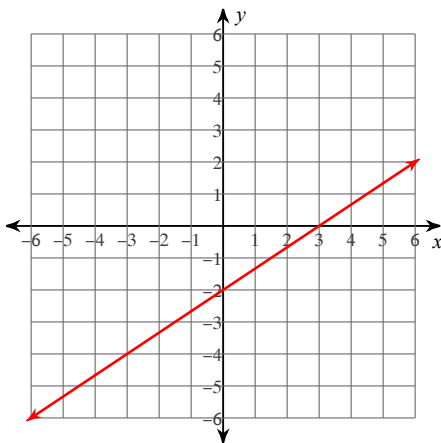
XV. Solve as directed.

15) Evaluate $f(x) = 3x + 2$ when $x = 10$ **32**

16) For $f(x) = 14x + 3$, find the value of x for which $f(x) = 73$ **5**

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

17) x -intercept = 3, y -intercept = -2

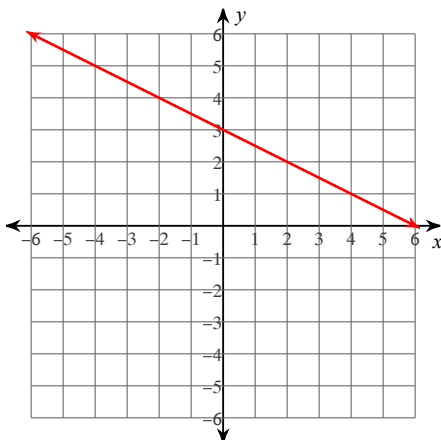


XVII. Find the x and y intercepts of the given function.

18) $5x - 30y = 60$ **x -int: 12 and y -int: -2**

XVIII. Sketch the graph of each line.

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



20) $y = -3$

