

1. Solve the inequality. Write your answer in interval notation.

$$-3 - 3(2x + 1) < x - (-3 - x)$$

2. Solve the equation.

$$6 - 3(-2 - 4x) = 2(3(x - 4) + 7)$$

3. Solve the equation.

$$5x - 7 = 7x - 2(x + 4)$$

4. Solve the equation.

$$2x - 6(x + 1) = -4x + 11$$

5. Solve the equation.

$$-4(2y + 3) + 4 = -16$$

6. Solve the absolute value equation

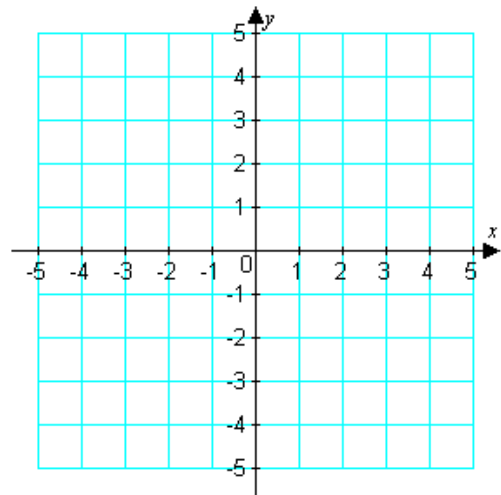
$$|-9z + 12| = -14$$

7. Solve the absolute value equation

$$|20z - 10| = 18$$

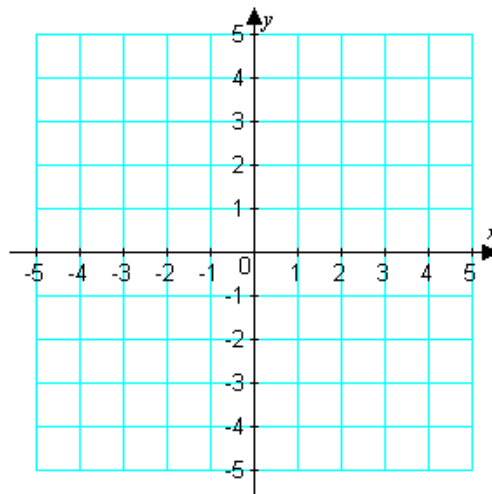
8. Complete the table, then graph the line. $3y = -2x + 3$

x	y
0	
	0
1	

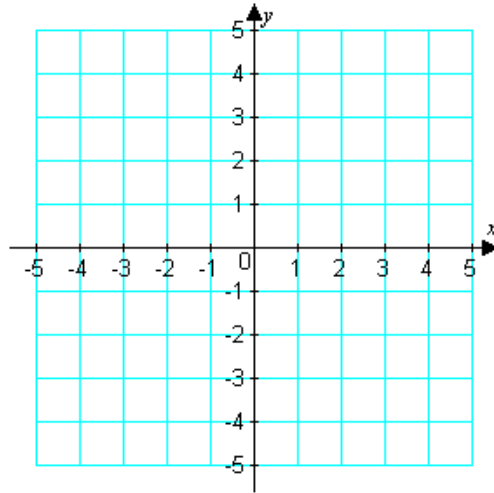


9. Graph the linear equation.

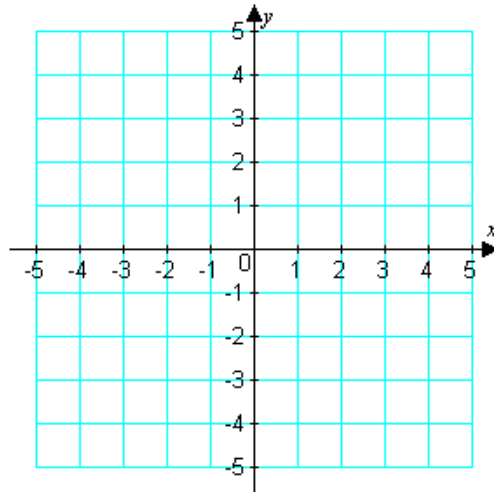
$$3y = -2x + 3$$



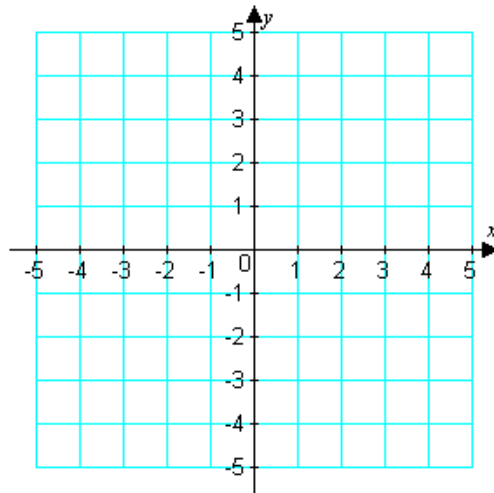
10. Graph the linear equation.
 $y = 3 - x$



11. Graph the linear equation.
 $y = -\frac{3}{4}x - 3$



12. Graph the linear equation.
 $x - 3y = -2$



13. Write an equation of the line satisfying the given conditions. Write the answer in slope-intercept form.

The line contains the point $(3, -5)$ and is parallel to $y = 2x - 1$.

14. Write an equation of the line satisfying the given conditions. Write the answer in slope-intercept form.

The line contains the point $(1, 12)$ and is parallel to $2y - 10x = 12$.

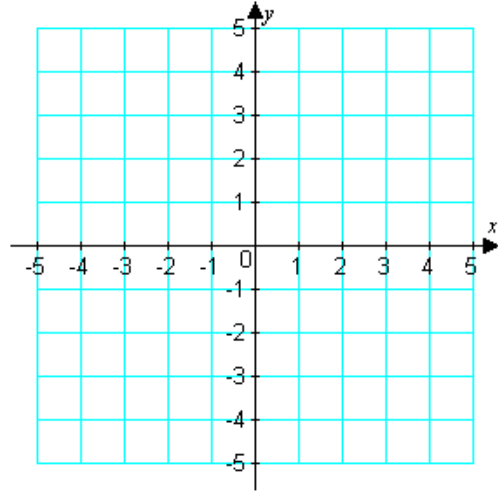
15. Write an equation of the line satisfying the given conditions. Write the answer in slope-intercept form.

The line passes through $(2, 2)$ and $(3, 9)$.

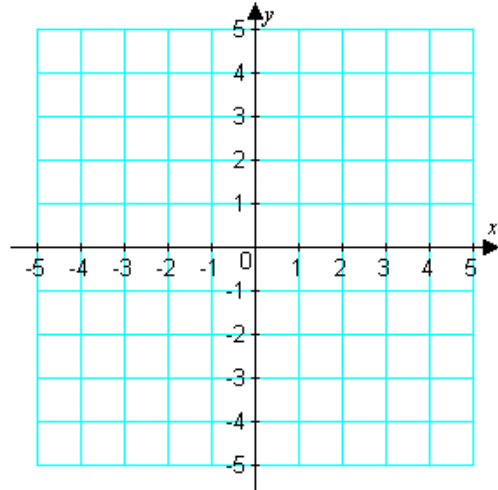
16. Write an equation of the line satisfying the given conditions. Write the answer in slope-intercept form.

The line passes through $(2, 9)$ and $(2, -10)$.

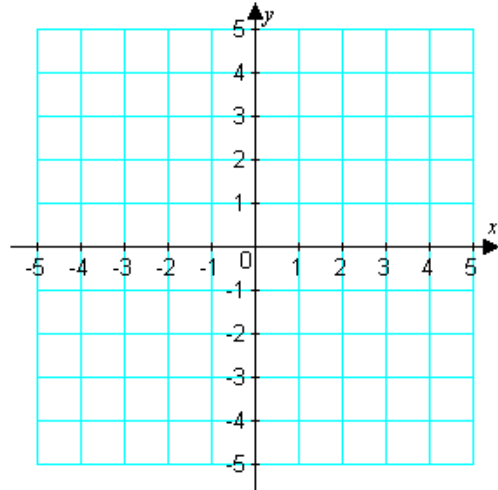
17. Graph the solution set of the inequality.
 $3y - 2x > 10$



18. Graph the solution set of the inequality.
 $20x - 8y < 40$



19. Graph the solutions set of the inequality
 $y < -3x + 4$



20. Solve the system of equations.

$$\begin{aligned}y &= x - 1 \\x + 7y &= 17\end{aligned}$$

21. Solve the system of equations.

$$\begin{aligned}x - 9y &= 5 \\3x + 7y &= -19\end{aligned}$$

22. Solve the system of equations.

$$\begin{aligned}5x - 3y &= -19 \\-5x + 4y &= 17\end{aligned}$$

23. Solve the system of equations.

$$\begin{aligned}9x - 9y &= -18 \\-5x + 9y &= -18\end{aligned}$$

24. Multiply the polynomials by using the distributive property.

$$(9s - 2)(s - 2)$$

25. Multiply the polynomials by using the distributive property.

$$(n^2 - 9)(2n - 7)$$

26. Multiply.

$$(-9p + 2)(-9p - 2)$$

27. Factor the trinomial.

$$6q^2 - 55q + 9$$

28. Factor the trinomial.

$$6u^2 + 36u + 48$$

29. If $z(t) = 2t + 7t - 4$, find $z(-3)$ and $z(2)$.

30. If $f(x) = 8x + 9$, find and simplify $f(2 + x)$.