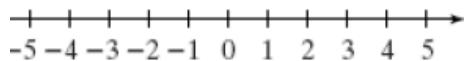


Solve each inequality. Graph the solutions on a number line.

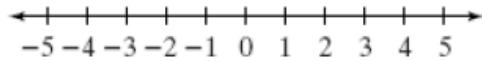
1. $5x + 2 \leq 17$



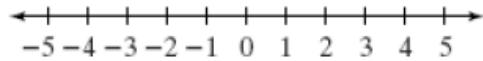
2. $21 \leq 3 + 9x$



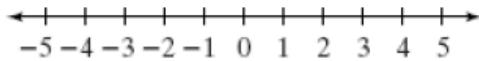
3. $9 - x > 10$



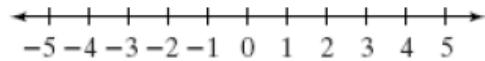
4. $27 \leq 7x + 6$



5. $2x - 5 > 1$



6. $-2x - 3 \leq -5$



Solve each inequality.

7. $9x - 7 \leq 38$

8. $3 < \frac{x}{2} + 1$

9. $-8x + 18 > -22$

10. $50 < 8 - 6x$

11. $-\frac{x}{5} + 6 > -3$

12. $30 \geq -30 - 6x$

13. $15 - 5k \geq 0$

14. $3 - \frac{x}{3} > -4$

15. $-2x - 14 \leq 86$

16. $11w + 6 \geq 182$

17. $\frac{x}{5} - 11 \geq -14$

18. $7 < 4q - 9$

Solve the Two-Step Equations – Integers

$$5x + 3 = 8$$

$$\frac{a + 2}{2} = -1$$

$$-6 - 2m = 10$$

$$\frac{x}{5} + 7 = 11$$

$$-5 = 7 + 3r$$

$$\frac{n - 6}{3} = -4$$

Answers

| | |
|----------------------------|------------------------------------|
| $5x + 3 = 8$ $x = 1$ | $\frac{a + 2}{2} = -1$ $a = -4$ |
| $-6 - 2m = 10$ $m = -8$ | $\frac{x}{5} + 7 = 11$ $x = 20$ |
| $-5 = 7 + 3r$ $r = -4$ | $\frac{n - 6}{3} = -4$ $n = -6$ |

Solve the Two-Step Equations – Integers

$$4 + 3p = 19$$

$$\frac{x}{-3} - 2 = 9$$

$$-6k - 13 = 83$$

$$17(x + 5) = 0$$

$$7 = \frac{10 - g}{-2}$$

$$-7 = -11 + \frac{v}{5}$$

Answers

$$4 + 3p = 19$$

$$p = 5$$

$$\frac{x}{-3} - 2 = 9$$

$$x = -33$$

$$-6k - 13 = 83$$

$$k = -16$$

$$17(x + 5) = 0$$

$$x = -5$$

$$7 = \frac{10 - g}{-2}$$

$$g = 24$$

$$-7 = -11 + \frac{v}{5}$$

$$v = 20$$

Solve the Two-Step Equations – Integers

$$-24 = 7x + 18$$

$$-8(3 - s) = 32$$

$$\frac{k}{-3} - 11 = -20$$

$$8q = -10q + 36$$

$$\frac{z}{3} = z - 2$$

$$\frac{b + 4}{7} = -3$$

Answers

| | |
|---------------------------------------|-------------------------------------|
| $-24 = 7x + 18$ $x = -6$ | $-8(3 - s) = 32$ $s = 7$ |
| $\frac{k}{-3} - 11 = -20$ $k = 27$ | $8q = -10q + 36$ $q = 2$ |
| $\frac{z}{3} = z - 2$ $z = 3$ | $\frac{b + 4}{7} = -3$ $b = -25$ |

Solve the Multi-Step Equations - Integers

$$12 + 5x - 8 = 12x - 10$$

$$\frac{x + 2}{x - 3} = 2$$

$$\frac{5x}{2} = 3x + 5$$

$$2(3x - 4) = 3x + 1$$

$$3x = 5(x + 3) - 3$$

$$\frac{x - 5}{2} = \frac{x + 2}{3}$$

Answers

$$12 + 5x - 8 = 12x - 10$$

$$x = 2$$

$$\frac{5x}{2} = 3x + 5$$

$$x = -10$$

$$3x = 5(x + 3) - 3$$

$$x = -6$$

$$\frac{x + 2}{x - 3} = 2$$

$$x = 8$$

$$2(3x - 4) = 3x + 1$$

$$x = 3$$

$$\frac{x - 5}{2} = \frac{x + 2}{3}$$

$$x = 19$$

Solve the Multi-Step Equations - Integers

$$4x + 7 - 6x = 5 - 4x + 4$$

$$\frac{x}{2} + \frac{x}{3} = 5$$

$$\frac{3x - 1}{3x + 2} = 4$$

$$3(5x - 2) + 4x = 9x + 6 - 2x$$

$$\frac{5x + 6}{4} = 3x - 2$$

$$5(2x + 3) = 3(4x + 1) - 2(3x + 2)$$

Answers

| | |
|-----------------------------|-------------------------------------|
| $4x + 7 - 6x = 5 - 4x + 4$ | $\frac{x}{2} + \frac{x}{3} = 5$ |
| $x = 1$ | $x = 6$ |
| $\frac{3x - 1}{3x + 2} = 4$ | $3(5x - 2) + 4x = 9x + 6 - 2x$ |
| $x = -1$ | $x = 1$ |
| $\frac{5x + 6}{4} = 3x - 2$ | $5(2x + 3) = 3(4x + 1) - 2(3x + 2)$ |
| $x = 2$ | $x = -4$ |