

Two-Step Equations

7th Grade

Undo in reverse order: plus and minus first, then times and divide.

To solve, reverse the order of operations. Undo addition and subtraction before multiplication and division.

$$3x - 4 = 11 \rightarrow 3x = 15 \rightarrow x = 5$$

$$3x - 4 = 11$$

$$x = 5$$

Add 4, then divide by 3.

$$x/2 + 7 = 10$$

$$x = 6$$

Subtract 7, then multiply by 2.

$$-2x + 9 = 1$$

$$x = 4$$

Subtract 9 $\rightarrow -2x = -8 \rightarrow$ divide by -2 .

$$5 - x = 2$$

$$x = 3$$

Subtract 5 $\rightarrow -x = -3 \rightarrow$ multiply by -1 .

THE COMMON MISTAKE

✗ $3x - 4 = 11 \rightarrow$ divide by 3 first

✓ **add 4 first**

Order of operations built the expression; reversing it takes it apart.

Substitute your answer back into the original equation. Every time.