

**Your goal is to get  $x$  by itself.**

Get rid of everything **except** the  $x$ .

You need  $x =$  , or  $= x$  , or even  $x =$

Ask two questions:

1) **What do I want to **get rid of**?**

2) **How is it held there?**

(Now use opposite operation to **get rid of it**.)

If held by multiplication, then divide.

If held by division, then multiply.

Solve for  $x$ .

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$$5x = 20$$

$$rx = k$$

$$\frac{x}{3} = 10$$

$$\frac{x}{r} = q$$

$$\frac{1}{3}x = 10$$

Ask two questions:

1) **What do I want to *get rid of*?**

2) **How is it held there?**

(Now use opposite operation to *get rid of it*.)

If held by addition or subtraction,  
use opposite sign *of the term you want to *get rid of**.

Solve for  $x$ .

$$x + 7 = 10$$

$$x + r = k$$

$$x - 9 = -20$$

Solve for  $k$ .

$$-4 + k = 7$$

$$k + 8 = -10$$

$$2 = -6 + k$$

Ask two questions:

1) **What do I want to get rid of?**

2) **How is it held there?**

(Now use opposite operation to **get rid of it.**)

Solve each equation.

$$2x + 5 = 19$$

$$14 = 3a - 1$$

$$13 - 5y = -27$$

$$4m - 6 = 93 - 7m$$

$$-8 + 11n = 6n - 28$$