Solving Simple Equations

One step equations

1. $x+3=10$

$-3 \quad -3$

x = 13

Subtract 3 from both sides since x + 3 – 3 = x and we want x by itself.

3. 3x = 12

$\frac{3x}{3}=\frac{12}{3}$

x = 4

Divide both sides by 3, since $\frac{3x}{3}$ = x and we want x by itself.

5. 2x + 3 =11

$-3 \quad -3$

2x = 8

$\frac{2x}{2}=\frac{8}{2}$

x = 4

Subtract 3 from both sides to get the x term by itself.

Divide both sides by 2 to get x by itself.

7. 2x – 3 = 11

$+3 \quad +3$

2x = 14

$\frac{2x}{2}=\frac{14}{2}$

Add 3 to both sides to get the x term by itself.

Divide both sides by 2 to get x by itself.

Two step equations

2. x– 3 = 10

$+3 \quad +3$

x = 1

Add 3 to both sides since x – 3 + 3 = x and we want x by itself.

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

$3\left(\frac{x}{3}\right)=3(10)$

x = 30

Multiply both sides by 3 since $3\left(\frac{x}{3}\right)$ = x and we want x by itself.

6. $\frac{x}{2}+3=11$

$-3 \quad -3$

$\frac{x}{2}=8$

$2\left(\frac{x}{2}\right)=2(8)$

x = 16

Subtract 3 from both sides to get the x term by itself.

Multiply both sides by 2 since $2\left(\frac{x}{2}\right)$ = x and we want x by itself.

8. $\frac{x}{2}-3=11$

$+3 \quad +3$

$\frac{x}{2}=14$

$2\left(\frac{x}{2}\right)=2(14)$

x = 28

Add 3 to both sides to get the x term by itself.

Multiply both sides by 2 since $2\left(\frac{x}{2}\right)$ = x and we want x by itself.