

Solving Basic Equations with Addition or Subtraction - Set 1

AB-SE1 1

Instructions: Use addition or subtraction to solve each equation.

$$\begin{array}{r} \text{1} \quad x + 5 = 16 \\ \quad -5 \quad -5 \\ \hline \quad x = 11 \end{array}$$

$$\begin{array}{r} \text{2} \quad x - 8 = 12 \\ \quad +8 \quad +8 \\ \hline \quad x = 20 \end{array}$$

$$\text{3} \quad x - 10 = 4$$

$$\text{4} \quad 3 + x = 18$$

$$\text{5} \quad 29 = x - 11$$

$$\text{6} \quad 13 = x + 13$$

$$\text{7} \quad 12 - x = 5$$

$$\text{8} \quad 12 + x = 15$$

$$\text{9} \quad x - 9 = 23$$

$$\text{10} \quad 25 - x = 11$$

$$\text{11} \quad x + 18 = 31$$

$$\text{12} \quad x - 6 = 17$$

Solving Basic Equations with Addition or Subtraction - Set 2

AB-SE1 2

Instructions: Use addition or subtraction to solve each equation.

$$\begin{array}{r} 1 \quad 7 + x = 19 \\ -7 \quad -7 \\ \hline x = 12 \end{array}$$

$$\begin{array}{r} 2 \quad 14 - x = 5 \\ +x \quad +x \\ \hline 14 = 5 + x \\ -5 \quad -5 \\ \hline 9 = x \text{ or } x = 9 \end{array}$$

$$3 \quad 3 = x - 41$$

$$4 \quad 14 + x = 26$$

$$5 \quad 45 - x = 32$$

$$6 \quad 25 = x + 24$$

$$7 \quad 39 - x = 12$$

$$8 \quad 80 - x = 54$$

$$9 \quad x - 15 = 6$$

$$10 \quad x - 3 = 75$$

$$11 \quad 11 + x = 30$$

$$12 \quad x + 33 = 98$$

Solving Basic Equations (with decimals)

AB-SE1 3

Instructions: Use addition or subtraction to solve each equation. You can use a calculator to do the decimal arithmetic if you'd like to.

1 $x + 2.5 = 4.0$

2 $x - 0.6 = 1.1$

3 $3.1 = x - 1.5$

4 $6.4 = x + 2.6$

5 $1.7 - x = 1.2$

6 $0.9 + x = 1.0$

7 $x - 3.6 = 1.4$

8 $1.05 + x = 2.2$

9 $x - 0.1 = 0.9$

10 $3.14 - x = 0.55$

Solving Basic Equations (with negative numbers)

AB-SE1 4

Instructions: Use addition or subtraction to solve each equation.

1 $x + 2 = -4$

2 $x - 8 = -3$

3 $-7 = x - 7$

4 $-15 = x + 13$

5 $x - 10 = -1$

6 $-1 - x = -8$

7 $-25 + x = -8$

8 $-14 + x = 10$

9 $-30 - x = -25$

10 $x - 20 = -6$

Solving Basic Equations - Part I

1 Solve for x

$$x + 6 = 18$$

2 Solve for x

$$5 + x = 19$$

3 Solve for x

$$30 = x + 22$$

4 Solve for x

$$24 = 13 + x$$

5 Solve for x

$$x - 7 = 3$$

6 Solve for x

$$40 = x - 15$$

7 Solve for x

$$x - 14 = 5$$

8 Solve for x

$$14 - x = 5$$

9 Solve for x

$$64 - x = 17$$

10 Solve for x

$$10 - x = 12$$

Solving Basic Equations with Addition or Subtraction - Set 1

AB-SE1 1

Instructions: Use addition or subtraction to solve each equation.

$$\begin{array}{r} \text{1} \quad x + 5 = 16 \\ \quad -5 \quad -5 \\ \hline x = 11 \end{array}$$

$$\begin{array}{r} \text{2} \quad x - 8 = 12 \\ \quad +8 \quad +8 \\ \hline x = 20 \end{array}$$

$$\begin{array}{r} \text{3} \quad x - 10 = 4 \\ \quad +10 \quad +10 \\ \hline x = 14 \end{array}$$

$$\begin{array}{r} \text{4} \quad 3 + x = 18 \\ \quad -3 \quad \quad -3 \\ \hline x = 15 \end{array}$$

$$\begin{array}{r} \text{5} \quad 29 = x - 11 \\ \quad +11 \quad \quad +11 \\ \hline 40 = x \\ x = 40 \end{array}$$

$$\begin{array}{r} \text{6} \quad 13 = x + 13 \\ \quad -13 \quad \quad -13 \\ \hline 0 = x \\ x = 0 \end{array}$$

$$\begin{array}{r} \text{7} \quad 12 - x = 5 \\ \quad +x \quad +x \\ \hline 12 = 5 + x \\ \quad -5 \quad -5 \\ \hline 7 = x \quad \text{or} \quad x = 7 \end{array}$$

$$\begin{array}{r} \text{8} \quad 12 + x = 15 \\ \quad -12 \quad \quad -12 \\ \hline x = 3 \end{array}$$

$$\begin{array}{r} \text{9} \quad x - 9 = 23 \\ \quad +9 \quad +9 \\ \hline x = 32 \end{array}$$

$$\begin{array}{r} \text{10} \quad 25 - x = 11 \\ \quad +x \quad +x \\ \hline 25 = 11 + x \\ \quad -11 \quad -11 \\ \hline 14 = x \quad \text{or} \quad x = 14 \end{array}$$

$$\begin{array}{r} \text{11} \quad x + 18 = 31 \\ \quad -18 \quad -18 \\ \hline x = 13 \end{array}$$

$$\begin{array}{r} \text{12} \quad x - 6 = 17 \\ \quad +6 \quad +6 \\ \hline x = 23 \end{array}$$

Solving Basic Equations with Addition or Subtraction - Set 2

AB-SE1 2

Instructions: Use addition or subtraction to solve each equation.

$$\begin{array}{r} 1 \quad 7 + x = 19 \\ -7 \quad -7 \\ \hline x = 12 \end{array}$$

$$\begin{array}{r} 2 \quad 14 - x = 5 \\ +x \quad +x \\ \hline 14 = 5 + x \\ -5 \quad -5 \\ \hline 9 = x \text{ or } x = 9 \end{array}$$

$$\begin{array}{r} 3 \quad 3 = x - 41 \\ +41 \quad +41 \\ \hline 44 = x \\ \hline x = 44 \end{array}$$

$$\begin{array}{r} 4 \quad 14 + x = 26 \\ -14 \quad -14 \\ \hline x = 12 \end{array}$$

$$\begin{array}{r} 5 \quad 45 - x = 32 \\ +x \quad +x \\ \hline 45 = 32 + x \\ -32 \quad -32 \\ \hline 13 = x \text{ or } x = 13 \end{array}$$

$$\begin{array}{r} 6 \quad 25 = x + 24 \\ -24 \quad -24 \\ \hline 1 = x \\ \hline x = 1 \end{array}$$

$$\begin{array}{r} 7 \quad 39 - x = 12 \\ +x \quad +x \\ \hline 39 = 12 + x \\ -12 \quad -12 \\ \hline 27 = x \text{ or } x = 27 \end{array}$$

$$\begin{array}{r} 8 \quad 80 - x = 54 \\ +x \quad +x \\ \hline 80 = 54 + x \\ -54 \quad -54 \\ \hline 26 = x \text{ or } x = 26 \end{array}$$

$$\begin{array}{r} 9 \quad x - 15 = 6 \\ +15 \quad +15 \\ \hline x = 21 \end{array}$$

$$\begin{array}{r} 10 \quad x - 3 = 75 \\ +3 \quad +3 \\ \hline x = 78 \end{array}$$

$$\begin{array}{r} 11 \quad 11 + x = 30 \\ -11 \quad -11 \\ \hline x = 19 \end{array}$$

$$\begin{array}{r} 12 \quad x + 33 = 98 \\ -33 \quad -33 \\ \hline x = 65 \end{array}$$

Solving Basic Equations (with decimals)

AB-SE1 3

Instructions: Use addition or subtraction to solve each equation. You can use a calculator to do the decimal arithmetic if you'd like to.

$$\begin{array}{r} 1 \quad x + 2.5 = 4.0 \\ -2.5 \quad -2.5 \end{array}$$

$$x = 1.5$$

$$\begin{array}{r} 2 \quad x - 0.6 = 1.1 \\ +0.6 \quad +0.6 \end{array}$$

$$x = 1.7$$

$$\begin{array}{r} 3 \quad 3.1 = x - 1.5 \\ +1.5 \quad +1.5 \\ 4.6 = x \end{array}$$

$$x = 4.6$$

$$\begin{array}{r} 4 \quad 6.4 = x + 2.6 \\ -2.6 \quad -2.6 \\ 3.8 = x \end{array}$$

$$x = 3.8$$

$$\begin{array}{r} 5 \quad 1.7 - x = 1.2 \\ +x \quad +x \\ 1.7 = 1.2 + x \\ -1.2 \quad -1.2 \end{array}$$

$$0.5 = x \quad \text{or} \quad x = 0.5$$

$$\begin{array}{r} 6 \quad 0.9 + x = 1.0 \\ -0.9 \quad -0.9 \end{array}$$

$$x = 0.1$$

$$\begin{array}{r} 7 \quad x - 3.6 = 1.4 \\ +3.6 \quad +3.6 \end{array}$$

$$x = 5.0$$

$$\begin{array}{r} 8 \quad 1.05 + x = 2.2 \\ -1.05 \quad -1.05 \end{array}$$

$$x = 1.15$$

$$\begin{array}{r} 9 \quad x - 0.1 = 0.9 \\ +0.1 \quad +0.1 \end{array}$$

$$x = 1.0$$

$$\begin{array}{r} 10 \quad 3.14 - x = 0.55 \\ +x \quad +x \end{array}$$

$$3.14 = 0.55 + x$$

$$-0.55 \quad -0.55$$

$$2.59 = x \quad \text{or} \quad x = 2.59$$

Solving Basic Equations (with negative numbers)

AB-SE1 4

Instructions: Use addition or subtraction to solve each equation.

$$\begin{array}{r} 1 \quad x + 2 = -4 \\ \quad -2 \quad -2 \\ \hline x = -6 \end{array}$$

$$\begin{array}{r} 2 \quad x - 8 = -3 \\ \quad +8 \quad +8 \\ \hline x = 5 \end{array}$$

$$\begin{array}{r} 3 \quad -7 = x - 7 \\ \quad +7 \quad +7 \\ \hline 0 = x \\ \hline x = 0 \end{array}$$

$$\begin{array}{r} 4 \quad -15 = x + 13 \\ \quad -13 \quad -13 \\ \hline -28 = x \\ \hline x = -28 \end{array}$$

$$\begin{array}{r} 5 \quad x - 10 = -1 \\ \quad +10 \quad +10 \\ \hline x = 9 \end{array}$$

$$\begin{array}{r} 6 \quad -1 - x = -8 \\ \quad +x \quad +x \\ \hline -1 = -8 + x \\ \quad +8 \quad +8 \\ \hline 7 = x \quad \text{or} \quad x = 7 \end{array}$$

$$\begin{array}{r} 7 \quad -25 + x = -8 \\ \quad +25 \quad +25 \\ \hline x = 17 \end{array}$$

$$\begin{array}{r} 8 \quad -14 + x = 10 \\ \quad +14 \quad +14 \\ \hline x = 24 \end{array}$$

$$\begin{array}{r} 9 \quad -30 - x = -25 \\ \quad +x \quad +x \\ \hline -30 = -25 + x \\ \quad +25 \quad +25 \\ \hline -5 = x \quad \text{or} \quad x = -5 \end{array}$$

$$\begin{array}{r} 10 \quad x - 20 = -6 \\ \quad +20 \quad +20 \\ \hline x = 14 \end{array}$$

Solving Basic Equations - Part I

1 Solve for x

$$x + 6 = 18$$

$$\begin{array}{r} -6 \quad -6 \\ x + 6 = 18 \\ \hline \end{array}$$

$$x = 12$$

2 Solve for x

$$5 + x = 19$$

$$\begin{array}{r} -5 \quad -5 \\ 5 + x = 19 \\ \hline \end{array}$$

$$x = 14$$

3 Solve for x

$$30 = x + 22$$

$$\begin{array}{r} -22 \quad -22 \\ 30 = x + 22 \\ \hline \end{array}$$

$$8 = x$$

or $x = 8$

4 Solve for x

$$24 = 13 + x$$

$$\begin{array}{r} -13 \quad -13 \\ 24 = 13 + x \\ \hline \end{array}$$

$$11 = x$$

or $x = 11$

5 Solve for x

$$x - 7 = 3$$

$$\begin{array}{r} +7 \quad +7 \\ x - 7 = 3 \\ \hline \end{array}$$

$$x = 10$$

6 Solve for x

$$40 = x - 15$$

$$\begin{array}{r} +15 \quad +15 \\ 40 = x - 15 \\ \hline \end{array}$$

$$55 = x$$

or $x = 55$

7 Solve for x

$$x - 14 = 5$$

$$\begin{array}{r} +14 \quad +14 \\ x - 14 = 5 \\ \hline \end{array}$$

$$x = 19$$

8 Solve for x

$$14 - x = 5$$

$$\begin{array}{r} +x \quad +x \\ 14 - x = 5 \\ \hline \end{array}$$

$$14 = 5 + x$$

$$\begin{array}{r} -5 \quad -5 \\ 14 = 5 + x \\ \hline \end{array}$$

$$9 = x \quad \text{or} \quad x = 9$$

9 Solve for x

$$64 - x = 17$$

$$\begin{array}{r} +x \quad +x \\ 64 - x = 17 \\ \hline \end{array}$$

$$64 = 17 + x$$

$$\begin{array}{r} -17 \quad -17 \\ 64 = 17 + x \\ \hline \end{array}$$

$$47 = x \quad \text{or} \quad x = 47$$

10 Solve for x

$$10 - x = 12$$

$$\begin{array}{r} +x \quad +x \\ 10 - x = 12 \\ \hline \end{array}$$

$$10 = 12 + x$$

$$\begin{array}{r} -12 \quad -12 \\ 10 = 12 + x \\ \hline \end{array}$$

$$-2 = x \quad \text{or} \quad x = -2$$