## Solving Basic Equations with Addition or Subtraction - Set 1

AB-SE1 1

**Instructions:** Use addition or subtraction to solve each equation.

1 
$$x + 5 = 16$$
  
 $-5$   $-5$   
 $x = 11$ 

$$\begin{array}{c} x - 10 = 4 \\ +10 +10 \\ \hline \times = 14 \end{array}$$

$$\begin{array}{cccc}
 & 29 = x - 11 \\
 & +11 & +11 \\
 & 40 = x \\
\hline
 & x = 40
\end{array}$$

$$\begin{array}{ccc}
 & 13 = x + 13 \\
 & -13 & -13 \\
 & 0 = x \\
 \hline
 & x = 0
 \end{array}$$

7 
$$12 - x = 5$$
  
 $+x + x$   
 $12 = 5 + x$   
 $-5 - 5$   
 $7 = x$  or  $x = 7$ 

$$\begin{array}{ccc}
 & 12 + x = 15 \\
 & -12 & -12
 \end{array}$$

$$x - 9 = 23$$

$$+9 + 9$$

$$x = 32$$

10 
$$25 - x = 11$$
  
 $+x + x$   
 $25 = 11 + x$   
 $-11 - 11$   
 $14 = x \text{ or } x = 14$ 

$$\begin{array}{c} 11 & x + 18 = 31 \\ -18 & -18 \\ \hline & x = 13 \end{array}$$

$$\begin{array}{ccc} & x - 6 = 17 \\ & +6 & +6 \\ \hline & \times & = 23 \end{array}$$

## Solving Basic Equations with Addition or Subtraction - Set 2

AB-SE1 2

**Instructions:** Use addition or subtraction to solve each equation.

2 
$$14 - x = 5$$
  
 $+x + x$   
 $14 = 5 + x$   
 $-5 - 5$   
 $9 = x \text{ or } x = 9$ 

$$3 = x - 41 
+41 +41 
44 = x$$

$$x = 44$$

5 
$$45 - x = 32$$
  
 $+x + x$   
 $45 = 32 + x$   
 $-32 - 32$   
 $13 = x \text{ or } x = 13$ 

$$\begin{array}{ccc}
 & 25 = x + 24 \\
 & -24 & -24 \\
 & 1 = x \\
\hline
 & x = 1
\end{array}$$

7 
$$39 - x = 12$$
 $+x + x$ 
 $39 = 12 + x$ 
 $-12 - 12$ 
 $27 = x \text{ or } x = 27$ 

80 - 
$$x = 54$$
  
+ $x$  + $x$   
80 = 54 +  $x$   
-54 -54  
26 =  $x$  or  $x = 26$ 

$$x - 15 = 6$$

$$+15 + 15$$

$$x = 21$$

$$x - 3 = 75$$

$$+3 + 3$$

$$x = 78$$

11 
$$+ x = 30$$
  
-11  $-11$   
 $\times = 19$ 

$$\begin{array}{ccc}
 & x + 33 = 98 \\
 & -33 & -33 \\
 & \times = 65
 \end{array}$$

## 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.

1 
$$x + 2.5 = 4.0$$
  
-2.5 -2.5  
 $x = 1.5$ 

$$\begin{array}{c} x - 0.6 = 1.1 \\ +0.6 +0.6 \\ \hline x = 1.7 \end{array}$$

3.1 = 
$$x - 1.5$$
  
+1.5 +1.5  
4.6 =  $x$   
 $x = 4.6$ 

$$\begin{array}{ccc}
4 & 6.4 = x + 2.6 \\
-2.6 & -2.6 \\
3.8 = x \\
\hline
x = 3.8
\end{array}$$

5 
$$1.7 - x = 1.2$$
  
 $+x + x$   
 $1.7 = 1.2 + x$   
 $-1.2 - 1.2$   
 $0.5 = x$  or  $x = 0.5$ 

$$\begin{array}{ccc}
0.9 + x = 1.0 \\
-0.9 & -0.9
\end{array}$$

$$x - 3.6 = 1.4$$
+3.6 +3.6
$$x = 5.0$$

$$\begin{array}{ccc}
1.05 + x &= 2.2 \\
-1.05 & & -1.05
\end{array}$$

$$x &= 1.15$$

$$\begin{array}{c} y & x - 0.1 = 0.9 \\ +0.1 & +0.1 \\ \hline & \times = 1.0 \end{array}$$

3.14 - 
$$x = 0.55$$
  
+ $x$  + $x$   
3.14 = 0.55 +  $x$   
-0.55 -0.55  
2.59 =  $x$  or  $x = 2.59$ 

## **Solving Basic Equations (with negative numbers)**

AB-SE1 4

**Instructions:** Use addition or subtraction to solve each equation.

$$x + 2 = -4$$

$$-2 \quad -2$$

$$x = -6$$

$$\begin{array}{ccc}
 & x - 8 = -3 \\
 & +8 & +8 \\
 & x = 5
 \end{array}$$

$$\begin{array}{ccc}
3 & -7 = x - 7 \\
+7 & +7 \\
0 = x \\
\hline
x = 0
\end{array}$$

$$\begin{array}{rrr}
4 & -15 = x + 13 \\
 & -13 & -13 \\
 & -28 = x
\end{array}$$

$$x - 10 = -1$$

$$+10 + 10$$

$$x = 9$$

6 
$$-1 - x = -8$$
  
 $+x + x$   
 $-1 = -8 + x$   
 $+8 + 8$   
 $7 = x$  or  $x = 7$ 

$$\begin{array}{ccc}
 & -25 + x = -8 \\
 & +25 & +25
\end{array}$$

$$x = 17$$

$$\begin{array}{ccc}
 & -14 + x = 10 \\
 & +14 & +14
\end{array}$$

$$x - 20 = -6$$
+20 +20
$$x = 14$$