

When we are asked to solve an equation we are trying to determine what value of x makes the mathematical statement true.

ex. $x + 5 = 8$

If $x = \underline{\quad}$ the statement is true.

To solve equations we want to get the variable term by itself by performing the opposite math operation.

Math Operation	Opposite Math Operation
+	
-	
×	
÷	

For example, when solving

$$x - 3 = 15$$



When working with equations we need to keep the equation balanced... Therefore whatever is done to one side needs to be done to the other side as well.

$$x - 3 \underline{\hspace{2cm}} = 15 \underline{\hspace{2cm}}$$

Example 2: Solve

a) $x + 4 = 70$

b) $25 = 5 + x$

c) $3x = 15$

d) $6y = -48$

Example 3: Solve

a) $\frac{b}{4} = 16$

b) $\frac{y}{2} = -3$

c) $f + \frac{1}{3} = \frac{2}{3}$

Solving Two Step Equations

Solve: $2x + 5 = 15$

Step 1:

Step 2:

Solve: $\frac{2}{5}a = -4$

Step 1:

Step 2:

Example : Solve.

a) $-4 = -3x + 2$

b) $8 - 4x = -8$

c) $9 = \frac{3}{4}z$

d) $-\frac{5}{6}x - 5 = 15$

Homework: Textbook: Page 159 #3, #4 and Page 160 #5, #6