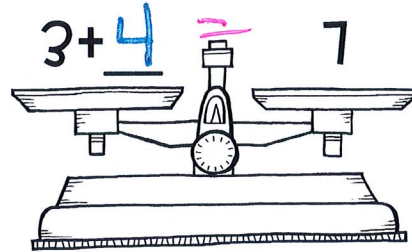
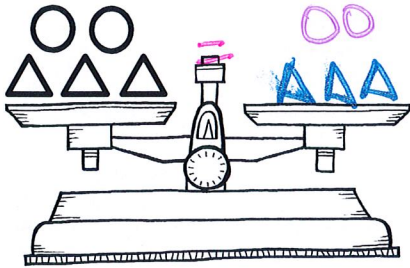


ONE-STEP EQUATIONS: ADDITION AND SUBTRACTION p. 41

Solving an Equation is like balancing a scale:
Both sides must remain EQUAL.



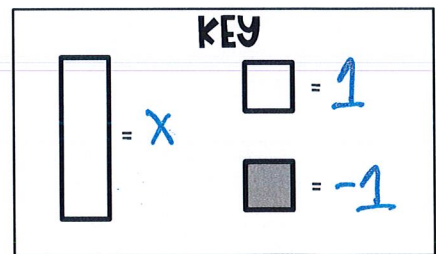
SOLVING ONE-STEP EQUATIONS

1. The Variable must be alone or isolated on one side of the equation.
2. Isolate the variable by using inverse or opposite operations.
3. The equation must remain balanced.
4. Check your Solution.

I
B
S

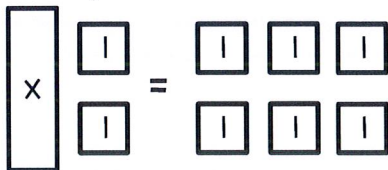
We can also use algebraic tiles to represent the equations

Use the key at right to write and solve the equation represented below.



Equation: $x + 4 = 10$ Solution: $x = 6$

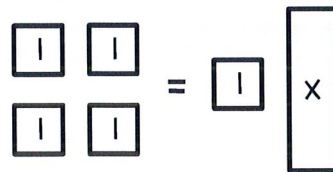
1. Write and solve the equation represented below.



Equation: _____

Solution: _____

2. Write and solve the equation represented below.



Equation: _____

Solution: _____

Solve the following one-step equations. Draw algebra tiles if needed, and then check your work.

p. 42

3. $x - 6 = 12$

$\begin{array}{r} +6 \quad +6 \\ x - 6 = 12 \\ \hline x = 18 \end{array}$

$x = 18$

✓ CHECK: $x - 6 = 12$
 $18 - 6 = 12$
 $12 = 12$ ✓

4. $x + 5 = 11$

$\begin{array}{r} -5 \quad -5 \\ x + 5 = 11 \\ \hline x = 6 \end{array}$

$x = 6$

✓ CHECK: $x + 5 = 11$
 $6 + 5 = 11$
 $11 = 11$ ✓

5. $3 + x = 7$

$\begin{array}{r} -3 \quad -3 \\ 3 + x = 7 \\ \hline x = 4 \end{array}$

$x = 4$

✓ CHECK: $3 + x = 7$
 $3 + 4 = 7$
 $7 = 7$ ✓

6. $15 = x - 2$

$\begin{array}{r} +2 \quad +2 \\ 15 = x - 2 \\ \hline x = 17 \end{array}$

$x = 17$

✓ CHECK: $15 = x - 2$
 $15 = 17 - 2$
 $15 = 15$ ✓

7. $17 = x + 4$

$x = \underline{\hspace{2cm}}$

✓ CHECK:

8. $x + 4 = 11$

$x = \underline{\hspace{2cm}}$

✓ CHECK:

9. $x - 3 = 12$

$x = \underline{\hspace{2cm}}$

✓ CHECK:

10. $32 = x - 8$

$x = \underline{\hspace{2cm}}$

✓ CHECK:

Challenge!
 $x - 8.5 = 16.1$

$x = \underline{\hspace{2cm}}$

✓ CHECK:

Summarize today's lesson: