

By the end of this lesson you will be able to\_\_\_\_\_.

Example 1 - Which of the following equations are true?

What is an *equation*? - \_\_\_\_\_

What does it mean for an equation to be true? \_\_\_\_\_

Create three equations that are true.

1) \_\_\_\_\_ 2) \_\_\_\_\_ 3) \_\_\_\_\_

Example 2 - Solve for the variable  $x$  in the equation.

$$3 + x = 29$$

What do I need to do?

\_\_\_\_\_

1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

Example 3 - Solve for the variable  $x$  in the equation.

$$x - 12 = -15$$

What do I need to do?

\_\_\_\_\_

1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

Example 4 - Solve for the variable  $x$  in the equation.

$$-3x = -18$$

What do I need to do?

\_\_\_\_\_

1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

Example 5 - Solve for the variable  $x$  in the equation.

$$\frac{x}{7} = 21$$

What do I need to do?

\_\_\_\_\_

1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

What operation will you need to do in order to solve for the variable in each equation below?

What will the solution for  $x$  be?

1)  $\frac{x}{-9} = 3$

3)  $11 + x = 6$

2)  $12x = 144$

4)  $x - 32 = -9$

SHOWTIME - You Try!

Which of the following values for  $x$  will satisfy the equation  $4x + 2 = -x + 17$

a)  $x = -3$

b)  $x = 2$

c)  $x = 3$

d)  $x = 4$

Solve for the variable  $x$  in each equation. Make sure to check your work

1)  $x - 31 = 55$

2)  $15x = -60$

3)  $10 + x = -19$

4)  $\frac{x}{-4} = -8$