

Vocabulary review....

Finding the value of a
variable that makes an
equation true

Solve for x:

$$x + 2 = 3$$

Find the value of x so that $x + 2 = 3$ is a true statement.

Try to solve...

Solve for x:

$$4 + x = 6 \quad x = 2$$

$$x - 3 = 6 \quad x = 9$$

$$x + 8 = 12 \quad x = 4$$

When you are solving these equations, what are you doing to solve for x?

Write this down on your notes sheet and be prepared to share your answer.

- opposite of the number
- guess & check
- subtract answer from number
- Add/subtract to find
- Add/Subtract
- Counting up/down
- opposite of sign
- add or subtract

solve

$$\begin{array}{r} x + 8 = 12 \\ - 8 \quad - 8 \\ \hline x = 4 \end{array}$$

**Inverse operations are '*opposites*'
meaning they "*undo each other*"**

Drag to reveal the inverse of each operation

Addition	Subtraction
Subtraction	Addition
Multiplication	Division
Division	Multiplication

White Board Practice Problems

$$\begin{array}{r} 1. \quad x + 4 = 10 \\ \quad -4 \quad | \quad -4 \\ \hline \quad \quad x = 6 \end{array}$$

$$\begin{array}{r} 2. \quad 5 + x = 7 \\ \quad -5 \quad | \quad -5 \\ \hline \quad \quad x = 2 \end{array}$$

$$3. \quad x + 3 = 7$$

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

$$4. \quad 9 + x = 23$$

$$\begin{array}{r} 9 + x = 23 \\ \quad -9 \quad | \quad -9 \\ \hline \quad \quad x = 14 \end{array}$$

White Board Practice Problems

$$\begin{array}{r} 1. \ x - 4 = 10 \\ +4 \quad | \quad +4 \\ \hline x = 14 \end{array}$$

$$\begin{array}{r} 3. \ x - 3 = 7 \\ +3 \quad | \quad +3 \\ \hline x = 10 \end{array}$$

$$\begin{array}{r} 2. \ -5 + x = 7 \\ -5 + x = 7 \\ \hline 5 \quad | \quad 5 \\ x = 12 \end{array}$$

$$\begin{array}{r} 4. \ -9 + x = 23 \\ +9 \quad | \quad +9 \\ \hline x = 32 \end{array}$$



White Board Practice Problems

1. $x + 4 = -3$

3. $x - 3 = -7$

2. $-5 + x = -10$

4.
$$\begin{array}{r|l} -9 + x = -6 & \\ +9 & +9 \\ \hline & x = 3 \end{array}$$

