

Solving Two Step Equations Notes

GOAL OF SOLVING EQUATIONS:

STEPS:

1) Add or subtract to isolate the variable term

2) Multiply or divide to solve for the variable

INVERSES REVIEW:

_____ and _____ are inverses

Example: _____ + _____ = 0

_____ and _____ are inverses

Example: _____ · _____ = 1

Try it!

Example 1:

$$-2x + 10 = 22$$

Check:

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

$$-2x + 10 = 22$$

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

$$-2(\underline{\hspace{2cm}}) + 10 = 22$$

$$\underline{\hspace{2cm}} + 10 = 22$$

$$\underline{\hspace{2cm}} = 22$$

Example 2:

$$\frac{x}{5} - 9 = -3$$

Check:

$$\frac{x}{5} = \underline{\hspace{2cm}}$$

$$\frac{x}{5} - 9 = -3$$

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

$$\frac{\underline{\hspace{2cm}}}{5} - 9 = -3$$

$$\underline{\hspace{2cm}} - 9 = -3$$

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

Example 3:

$$\frac{x}{3} + 10 = 12$$

Check:

$$\frac{x}{3} = \underline{\hspace{2cm}}$$

$$\frac{x}{3} + 10 = 12$$

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

$$\frac{\underline{\hspace{2cm}}}{3} + 10 = 12$$

$$\underline{\hspace{2cm}} + 10 = 12$$

$$\underline{\hspace{2cm}} = 12$$

Example 4:

$$6x - 1 = 5$$

Check:

$$6x = \underline{\hspace{2cm}}$$

$$6x - 1 = 5$$

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

$$6(\underline{\hspace{2cm}}) - 1 = 5$$

$$\underline{\hspace{2cm}} - 1 = 5$$

$$\underline{\hspace{2cm}} = 5$$

Always remember to check your answers by substituting it in for x.
Both sides of the equation should be equal