

# Solving One-Step Equations

## Inverse Operations:

Addition  $\longleftrightarrow$  Subtraction

Multiplication  $\longleftrightarrow$  Division

Using Inverse Operations to Solve Equations:

- 1) Identify the operation, then perform the opposite
- 2) Whatever you do to one side of the equation, you must do to the other
- 3) Check your answer!

Ex 1:  $p + 5 = -10$

$$\begin{array}{r} p + 5 = -10 \\ \underline{-5 \quad -5} \end{array}$$

$$p + 0 = -15$$

$$\boxed{p = -15}$$

check!

$$-15 + 5 = -10$$

$$-10 = -10 \quad \checkmark$$

True Statement!  
Correct answer

$$\text{Ex 2: } \frac{-5t}{-5} = \frac{60}{-5}$$

$$t = -12$$

check!

$$(-5)(-12) = 60$$

$$60 = 60 \checkmark$$

Correct!

$$\text{Ex 3: } 16 = \frac{-4}{3}x$$

$$\frac{\cancel{-4}x}{\cancel{3}} = 16$$
$$\frac{-4}{3}x = \frac{-4}{3}$$

$$x = -12$$

check!

$$\left(\frac{-4}{3}\right)(-12) = 16$$

$$16 = 16 \checkmark$$

Correct!