

Solving Two-Step Equations

Two-Step Equations:

1) Use two sets of inverse operations

★ 2) Always want to work with the variable last!

$$\text{Ex 1: } 3x - 2 = 10$$

$$\begin{array}{r} - 2 10 \\ + 2 10 \\ \hline 3x 12 \\ \div 3 12 \div 3 \end{array}$$

$$\boxed{x = 4}$$

check!

$$3(4) - 2 = 10$$

$$12 - 2 = 10$$

$$10 = 10 \checkmark$$

$$\text{Ex 2: } 8 - 5w = -37$$

$$\begin{array}{r} 8 - 5w = -37 \\ -8 -8 \\ \hline -5w = -45 \\ \div -5 -45 \div -5 \end{array}$$

$$\boxed{w = 9}$$

$$\text{Ex 3: } \cancel{5} \cdot \frac{(x+10)}{\cancel{5}} = 41 \cdot 5$$

$$x + \cancel{10} = 205$$

$$\cancel{-10} \quad -10$$

$$\boxed{x = 195}$$