

# Warm-up

Solve - show all work

$$1) x - 7 = 3$$

$$+7 \quad +7$$

$$x = 10$$

$$2) 9x = 54$$

$$\frac{9x}{9} = \frac{54}{9}$$

$$x = 6$$

$$3) \frac{x}{6} = 8 \cdot 6$$

$$\frac{x}{6} = 48$$

$$x = 48$$

## 3.2 Two-Step Equations

One-Step - Just do one thing

Two-Step - Need undo 2 things

$$1) \begin{array}{r} \text{VT} \quad \text{CT} \quad \text{CT} \\ 3x + 11 = 14 \\ \hline \quad \quad \Delta \\ \quad -11 \quad -11 \end{array}$$

$$\frac{3x}{3} = \frac{3}{3}$$

$$x = 1$$

\* Subtract 11  
\* divide by 3

1<sup>st</sup> - Isolate VT  
(variable term)

2<sup>nd</sup> - Isolate the  
variable

$$2) \quad 13 = \frac{x}{4} + 9$$

$-9 \qquad -9$

$$4 \cdot 4 = \frac{x}{4} + 4$$

$x = 16$

$$3) \quad 7x + 12 = -16$$

$-12 \qquad -12$

$$\frac{7x}{7} = \frac{-28}{7}$$

$$x = -4$$

$$4) -16 = 5d - 9d$$

$$\begin{array}{r} +16 \\ \hline +4 \end{array} = \begin{array}{r} -4d \\ \hline -4 \end{array}$$

$$4 = d$$

$$5) \begin{array}{r} 9 + -x = 14 \\ -9 \qquad -9 \end{array}$$

$$\begin{array}{r} -x = 5 \\ \hline -1 \qquad -1 \end{array}$$

$$\boxed{x = -5}$$

← have 2 VT,  
So put them  
together

$$5 - 9 = -4$$