

## Chapter 4-2 Using Number Sense to Solve Equations

Objective : Solve one-step equations using substitution, mental math, and estimation.

Vocabulary:

Equation - is a mathematical sentence with an equal sign.

Open Sentence - is an equation with one or more variables

The open sentence  $P + 2 = 16$  is neither true nor false until p is replaced.

$$p + 2 = 16 \qquad 20 + 2 = 16 \text{ false}$$

$$14 + 2 = 16 \text{ true}$$

Find the solution of  $12m = 108$  from the numbers 4, 7, and 9. (Test each Number by substituting for m in the equations)

$$12(4) = 108 \qquad 12(7) = 108 \qquad 12(9) = 108$$

F                      F                      T

Substitution = replacing the variable with possible solutions

Using Estimation to solve

$$125.3 + w = 134.5$$

$$@125 + w = @135$$

$$w = @10$$

Reasonable?

$$\begin{array}{r} 134.5 \\ - 125.3 \\ \hline 9.2 \end{array}$$

