

## Section 4.6 Evaluating Formulas

**1. What is a Formula?** A formula is an equation that contains more than one variable.

Example: Can you recognize what each of the following formulas represents?

a.  $A = lw$

b.  $V = lwh$

c.  $A = \frac{1}{2}bh$

d.  $x + y = 180^\circ$

**2. Evaluating a Formula:** To evaluate a formula:

- Substitute all known values into the formula. You should have only one variable remaining.
- Solve this linear equation in one variable by the methods of the previous sections.

Example: Evaluate the given formulas for the given values of the variables.

a.  $I = P \cdot R \cdot T$  where  $P = \$2000$ ,  $R = \frac{6}{100}$  and  $T = 2\frac{1}{2}$  yrs.

b.  $P=2L+2W$  where  $P=30$  in. and  $W=6$  in.

c.  $F=\frac{9}{5}C + 32$  where  $C=120^\circ$