

# Algebra I

3-4

(Day 2)

## Solving Word Problems

- 15) The perimeter of a rectangle is 332 cm and the width is 76 cm. Find the rectangle's length. (pg 114)

Let  $x =$  length  $90\text{cm}$

$$x + 76 + x + 76 = 332$$

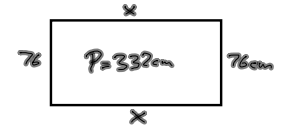
$$2x + 152 = 332$$

$$2x + 152 - 152 = 332 - 152$$

$$\frac{2x}{2} = \frac{180}{2}$$

$$x = 90$$

$$\{90\}$$



- 23) In any triangle, the sum of the measures of the angles is 180 degrees. In triangle ABC, angle A is three times as large as angle B and also 16 degrees larger than angle C. Find the measure of each angle.

Let  $x = \angle B$   $28^\circ$   
 $3x = \angle A$   $84^\circ$   
 $3x - 16 = \angle C$   $68^\circ$

$$x + (3x) + (3x - 16) = 180$$

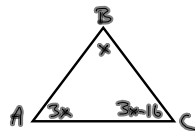
$$7x - 16 = 180$$

$$7x - 16 + 16 = 180 + 16$$

$$\frac{7x}{7} = \frac{196}{7}$$

$$x = 28$$

$$\{28\}$$



The reason angle C is  $3x - 16$  is because it says that A is 16 larger than C, so C is 16 less than A.

pg 114  
16-28 all