NAME _____

DATE _____

Module 4   Solving Problems Using Linear
             Equations of One Variable
Lesson 3   Solving Geometry Problems Using
             Equations of One Variable

**guided
notes**

Lesson Objective

• Write and solve linear equations of one variable to solve geometry
  problems about perimeter and angle sums.

_____ is the sum of the lengths of the sides of a polygon.

Three steps for solving a geometry problem are:

• _____

• _____

• _____

An isosceles triangle has _____ sides. The two

congruent sides are called _____ and the other side is called

the _____.

1 ▸ The perimeter of a square is 18 m. What is the length of each side?

_____

2 ▸ Consider a scalene triangle with its perimeter being 33 cm. The 2nd side is

twice the length of the 1st, and the 3rd side is 5 cm longer than the 1st. What

is the length of the longest side? _____

_____

3 ▸ The perimeter of a rectangle is 150 cm. Its length is twice its width. Find the

length of the rectangle. _____

_____

The sum of the measures of the angles of a triangle is _____.

Complementary angles are two angles whose measures have a sum of

_____.

Supplementary angles are two angles whose measures have a sum of

_____.

4 ▶ The measure of an angle is ten less than the measure of its supplement. Find
the measure of the angle. _____

_____

5 ▶ In an isosceles triangle, if each base angle measures 60° less than the vertex
angle, what is the measure of each base angle? _____

_____

6 ▶ In a triangle, the 2nd angle is twice the measure of the 1st. The 3rd angle is
three times the measure of the 1st. What is the measure of the largest angle?

_____