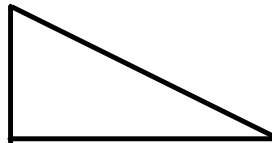4.2   Angle Measures of Triangles

Objective: Find angle measures in triangles.

Triangle Sum Theorem: The sum of the measures of the angles of a triangle is 180°.

A <u>corollary</u> to a theorem is a statement that can be proved easily using the theorem.

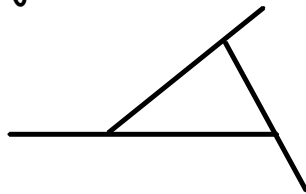Corollary to the Triangle Sum Theorem: The acute angles of a right triangle are complementary.

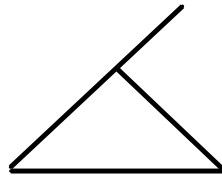Checkpoint at the bottom of page 180.

When the sides of a triangle are extended, other angles are formed.

The three original angles of the triangle are <u>interior angles</u>.

The angles that are adjacent to the interior angles are the <u>exterior angles</u>.

Exterior Angle Theorem: The measure of an exterior angle of a triangle is equal to the sum of the measures of the two nonadjacent interior angles.

Checkpoint at the bottom of page 181.