

# What do you need to know?

#### **Triangle Sum Theorem** The sum of the measures of the angles in every triangle is 180°

#### Third Angle Theorem If two angles of one triangle are equal in measure to two angles of another triangle, then the third angle in each triangle is equal in measure to the third angle in the other triangle.

## **Triangle Exterior Angle Theorem**

The measure of an exterior angle of a triangle is equal to the sum of the measures of the remote interior angles.

## Triangle Congruency Conjectures

**Base Angles Theorem** If a triangle is isosceles, then its base angles are congruent.

#### Converse of the Base Ang. Th. If a triangle has two congruent angles, then it is an isosceles triangle.

### **Vertex Angle Bisector Theorem**

In an isosceles triangle, the bisector of the vertex angle is also the altitude and the median to the base.