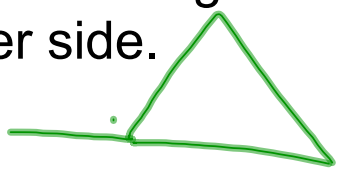
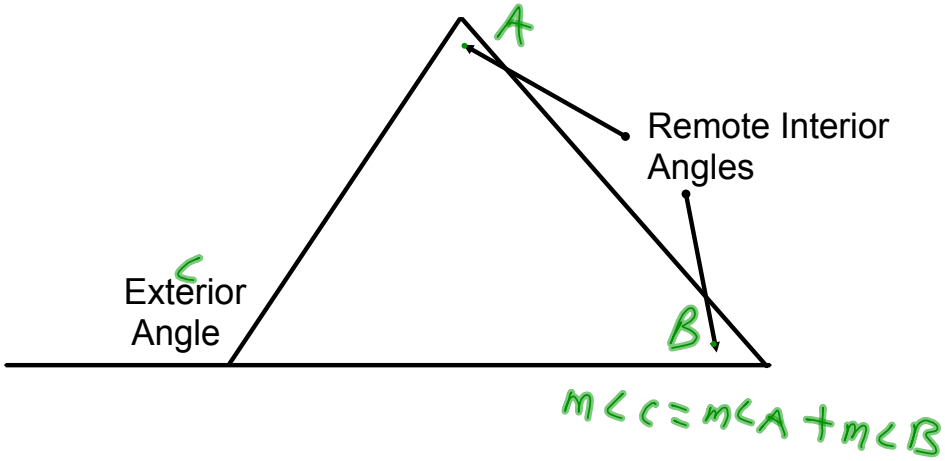
Exterior Angle:

* An angle on the outside of the triangle.
* Formed by one side of the triangle and the extension of another side.



Remote Interior Angles:

* The interior angles of the triangle not adjacent to a given exterior angle.



Exterior Angle Theorem:

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

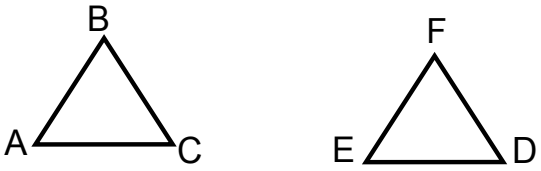
Angle Sum Theorem:

* All 3 angles of a triangle must add up to 180˚.

*$m\angle W + m\angle X + m\angle Y = 180$

Third Angle Theorem:

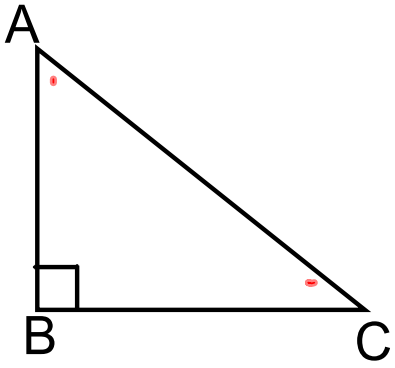
* If 2 angles of one triangle are congruent to 2 angles of a second triangle, then the third angles of the triangles are congruent.



If $\angle A \cong \angle D$ and $\angle B \cong \angle E$, then $\angle C \cong \angle F$.

Corollary:

* The acute angles of a right triangle are complementary.

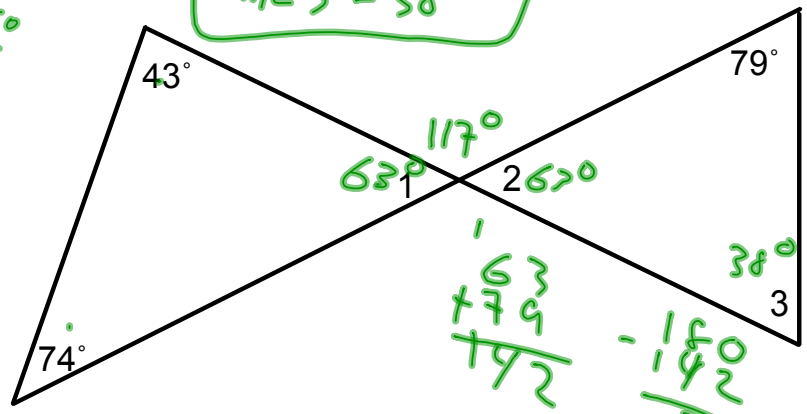


$m\angle A + m\angle C = 90^\circ$

Corollary:

* There can be at most one right angle or one obtuse angle in a triangle.

1. Find the missing angle measures.



2. Find the measure of each numbered angle in the figure.