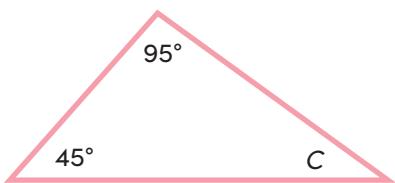


# FINDING MISSING ANGLES IN TRIANGLES

The **Triangle Angle-Sum Theorem** states that the measures of the interior angles of a triangle add up to  $180^\circ$ . You can use it to find a missing angle in a triangle.

**Let's try it!** Find  $m\angle C$  in the triangle below.



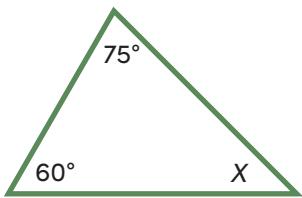
$$45^\circ + 95^\circ + m\angle C = 180^\circ$$

$$140^\circ + m\angle C = 180^\circ$$

$$m\angle C = 180^\circ - 140^\circ$$

$$m\angle C = 40^\circ$$

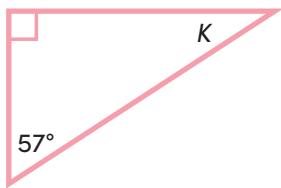
**Try it yourself!** Find the missing angle measure in each triangle.



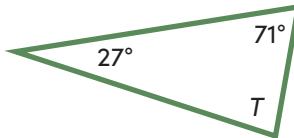
$$m\angle X = \underline{\hspace{2cm}} 45^\circ \underline{\hspace{2cm}}$$



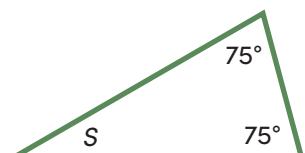
$$m\angle D = \underline{\hspace{2cm}} 25^\circ \underline{\hspace{2cm}}$$



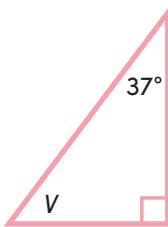
$$m\angle K = \underline{\hspace{2cm}} 33^\circ \underline{\hspace{2cm}}$$



$$m\angle T = \underline{\hspace{2cm}} 82^\circ \underline{\hspace{2cm}}$$



$$m\angle S = \underline{\hspace{2cm}} 30^\circ \underline{\hspace{2cm}}$$



$$m\angle V = \underline{\hspace{2cm}} 53^\circ \underline{\hspace{2cm}}$$

# FINDING MISSING ANGLES IN TRIANGLES

**Keep going!** Find the missing angle measure in each triangle.

