

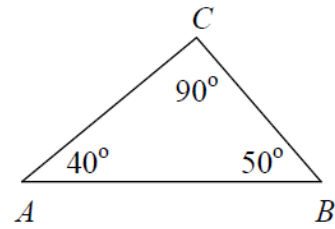
### Naming Angles

The most common way to name an angle is to use the three letters on the shape that define the angle, with the middle letter representing the vertex of the angle. In the diagram

$$m\angle CAB = 40^\circ, \quad m\angle ABC = 50^\circ, \quad \text{and} \quad m\angle BCA = 90^\circ.$$

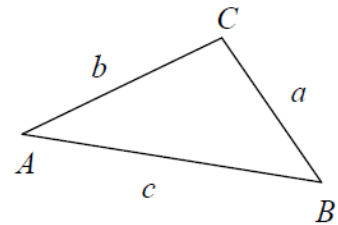
With simple geometric figures, as is the case with the diagram provided, the vertex alone can be used to define the angle.

$$m\angle A = 40^\circ, \quad m\angle B = 50^\circ, \quad \text{and} \quad m\angle C = 90^\circ$$



### Naming Sides of Triangles

The side opposite (across from) a specific vertex on a triangle is named using the same letter as the vertex but using a lower case letter. In the diagram, the side opposite vertex  $A$  or  $\angle A$  is called side  $a$ . The side opposite vertex  $B$  or  $\angle B$  is called side  $b$ . The side opposite vertex  $C$  or  $\angle C$  is called side  $c$ .

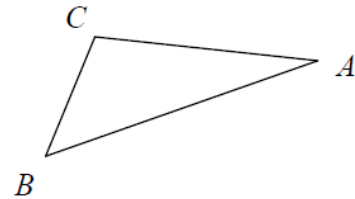


### Interior Angles of a Triangle

The interior angles of any triangle add up to  $180^\circ$ .

In the diagram:

$$\begin{aligned} & m\angle ABC + m\angle BAC + m\angle ACB \\ &= 48^\circ + 25^\circ + 107^\circ \\ &= 180^\circ \end{aligned}$$



### Interior Angles of a Quadrilateral

The interior angles of any quadrilateral (i.e. four-sided figure) add up to  $360^\circ$ .

In the diagram:

$$\begin{aligned} & m\angle HEF + m\angle EFG + m\angle FGH + m\angle GHE \\ &= 100^\circ + 128^\circ + 61^\circ + 71^\circ \\ &= 360^\circ \end{aligned}$$

