

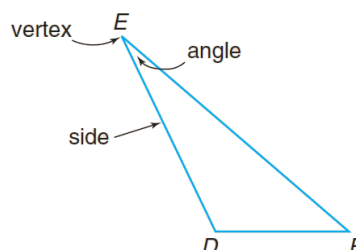
Triangle Classification

A **triangle** is a figure formed when three non collinear points are connected by segments. Each pair of segments forms an angle of the triangle. The **vertex** of each angle is a vertex of the triangle. Triangles are named by the letters at their vertices. Triangle DEF , written $\triangle DEF$, is shown below.

The sides are DE , EF , and DF .

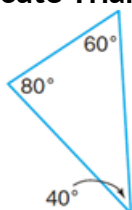
The vertices are D , E , and F .

The angles are $\angle D$, $\angle E$, and $\angle F$.



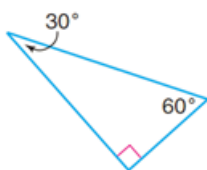
You classified angles as acute, obtuse, or right. Triangles can also be classified by their angles. All triangles have at least two acute angles. The third angle is either acute, obtuse, or right.

Acute Triangle



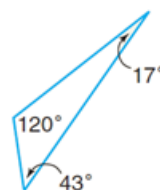
Three acute angles

Right Triangle



One right angles

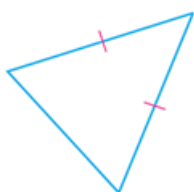
Obtuse Triangle



One obtuse angles

Triangles can also be classified by their sides.

Isosceles Triangle



Three congruent sides

Equiangular Triangle



At least two congruent sides

Scalene Triangle



No congruent sides

Since all sides of an equilateral triangle are congruent, then at least two of its sides are congruent. So, *all equilateral triangles are also isosceles triangles*. Some parts of isosceles triangles have special names.

