

Triangles

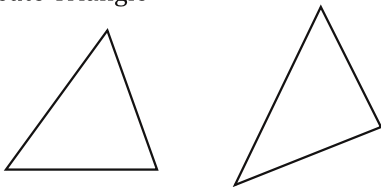
3...

A triangle is a polygon with three sides... (A polygon is just a figure made up of straight line segments).

Triangles are incredibly useful, that is why we will practice all kinds of problems with them. In physics a triangle is one of the strongest shapes; it can be used to find distances, navigate ships and airplanes and is even used for GPS. In fact, every other polygon can be made out of triangles. They are so important that there is a whole branch of mathematics dedicated to studying them (trigonometry).

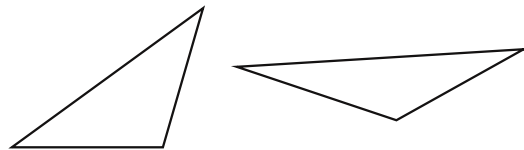
There are several classifications of triangles. You should know all of these...

Acute Triangle



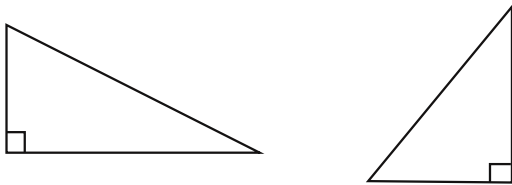
A triangle made of 3 acute angles.

Obtuse Triangle



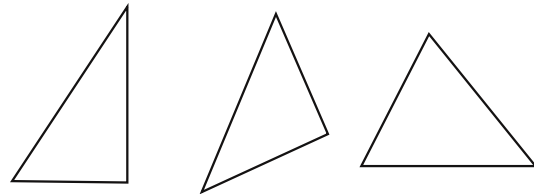
A triangle that has ONE obtuse angle.

Right Triangle



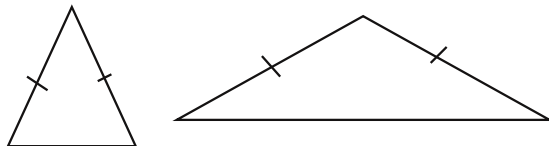
A triangle that has ONE right angle.

Scalene Triangle



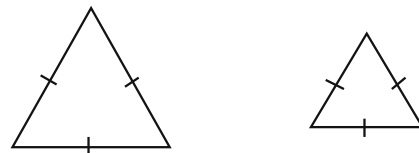
A triangle that has three sides of different lengths.

Isosceles Triangle



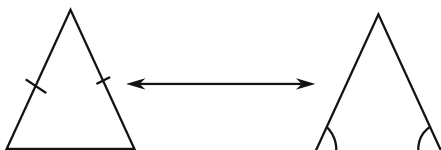
A triangle that has two sides that are the same length.

Equilateral Triangle



A triangle that has three sides that are the same length.

There is a theorem that says the two base angles of an isosceles triangle are also equal...



Also, because of the triangle sum theorem, (you will learn this later) all the angles in an equilateral triangle measure 60° .

