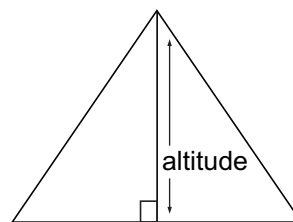


Angle side relationship in a triangle

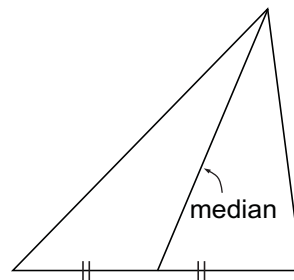
In a triangle, the greater side is opposite the greater angle, and vice versa.

Altitude of a triangle

An altitude (also known as height) is a line segment drawn from a vertex of the triangle, such that it intersects the opposite side at 90 degrees.

**Median of a triangle**

A median is the line segment joining the mid-point of a side with the opposite angle. The median bisects the area of a triangle.

**30-60-90 triangle**

A 30-60-90 triangle as the name suggests has its three angles measuring 30, 60, and 90 degrees respectively. In such a triangle, the following two relationships are useful:

The side opposite $30^\circ = \frac{1}{2}$ hypotenuse

The side opposite $60^\circ = \frac{\sqrt{3}}{2}$ hypotenuse

Pythagorean theorem

In a right angled triangle, the square of the measure of the hypotenuse is equal to the sum of the squares of the measures of the other two sides.

