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What Is The Formula For The Area Of A Triangle?

Today, we will be discussing the formula for the area of a triangle, and how to apply this formula in calculating the area of a triangle. I will use some examples that involves the application of this formula.

The formula for the area of a triangle is 1/2 bh. Where b is the base of the triangle and h is the height of the triangle. What does this mean? Let's consider some examples.

First let's look at a triangle in which the values of the height and sides are given.
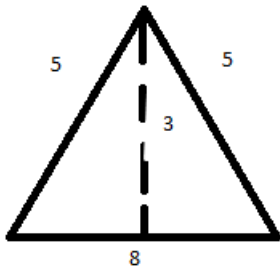
The height is defined by the distance between a side of a triangle to its opposing vertex. This is shown by the dotted line in the diagram. We can replace the value of h in the equation with 3.

The base of the triangle is the side which is connected to the vertex by our imaginary line. The base of this triangle would therefore be 8.
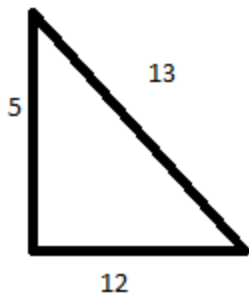
Using the formula 1/2 bh, and then replacing b and h with 8 and 3 respectively we can calculate the area of the triangle to be.

1/2(8)(3) = 12

Therefore, the area of this given triangle would be 12 square units.

Let's consider another example:

This image is a right triangle. When calculating the area for a right triangle, the base and height are simply the legs of the triangle. In this drawing we can consider the height to be 5 and the base to be 12. Keep in mind that these values are interchangeable.

We can then substitute b and h in the area formula as so

1/2 b h = A

1/2 (12)(5) = A

30 = A

We therefore calculate that this triangle has an area of 30 square units.

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