From Pythagorean Theorem

$c^2 = a^2 + b^2$

$b^2 = c^2 - a^2$

$c = 2a$

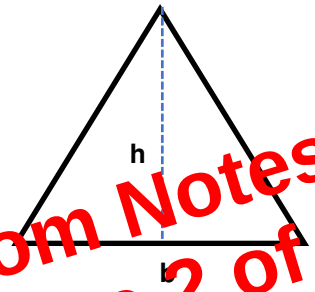
$b^2 = (2a)^2 - a^2$

$b^2 = 4a^2 - a^2$

$b^2 = 3a^2$

$b = \sqrt{3}a$

Area of a Triangle



$$A = \frac{1}{2}bh$$

A = Area

b = base

h = height

- Area of a triangle is the half of the product of base and height.

Review:

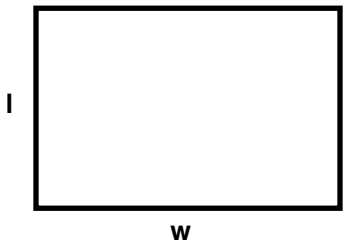
Area of a Rectangle:

$$A = wl$$

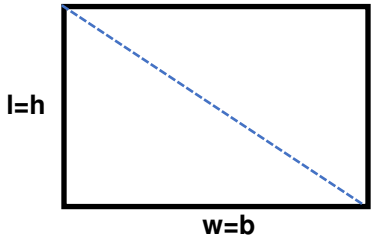
A = Area

l = length

w = width



If a rectangle was divided diagonally, it will create 2 equal triangles, thus the area of each triangle is half the area of the rectangle



$$A = \frac{1}{2}wl$$

$$A = \frac{1}{2}bh$$