Area

Area

- Area is the amount or extent of surface, especially the measure in *square units* of a two-dimensional (plane) figure of limited extent.
- A carpenter would need to know how to measure and calculate the *area* of a room in order to order and install flooring.

Area of a Square

Formula

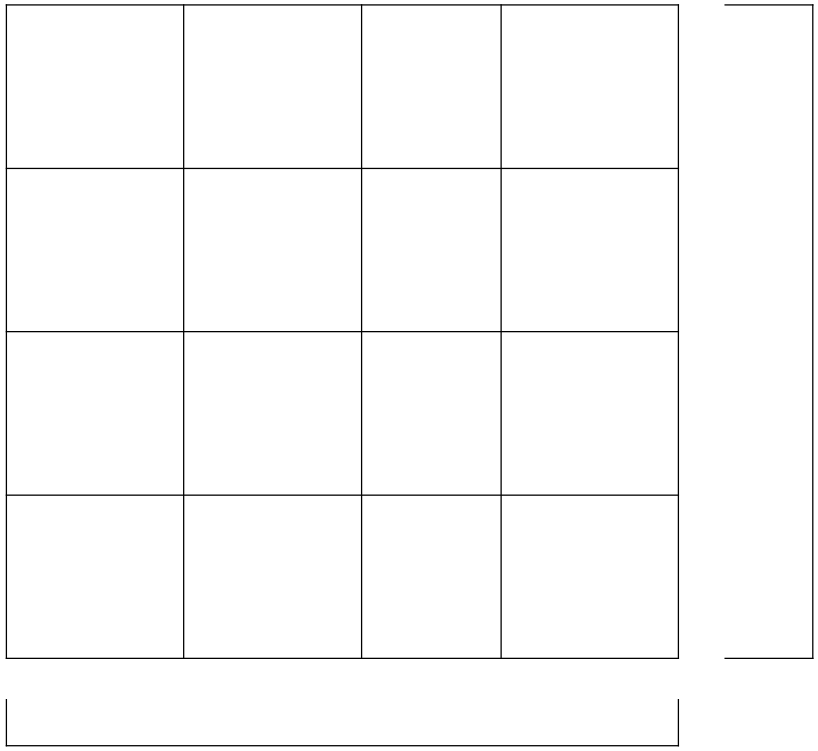
- The formula for calculating the area of a square is:

- $A = L \times W$

Area of a Square

Area of a Square

A = L x W



Area of a Rectangle

Formula

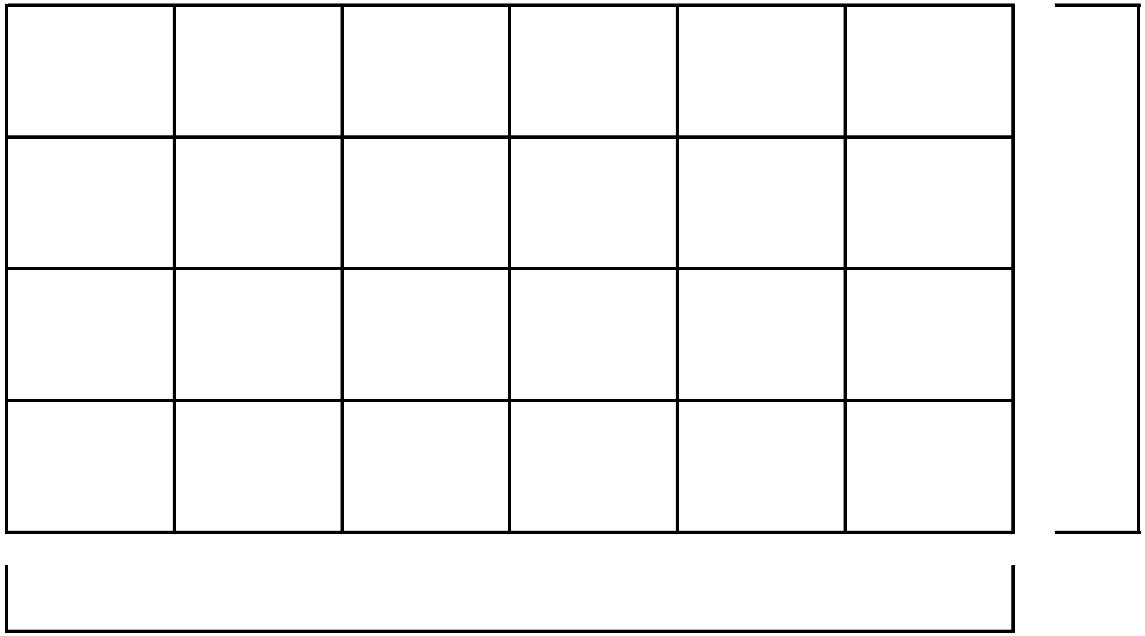
- The formula for calculating the area of a rectangle is:

- $A = L \times W$

Area of a Rectangle

Area of a Square

A = L x W



Area of a Triangle

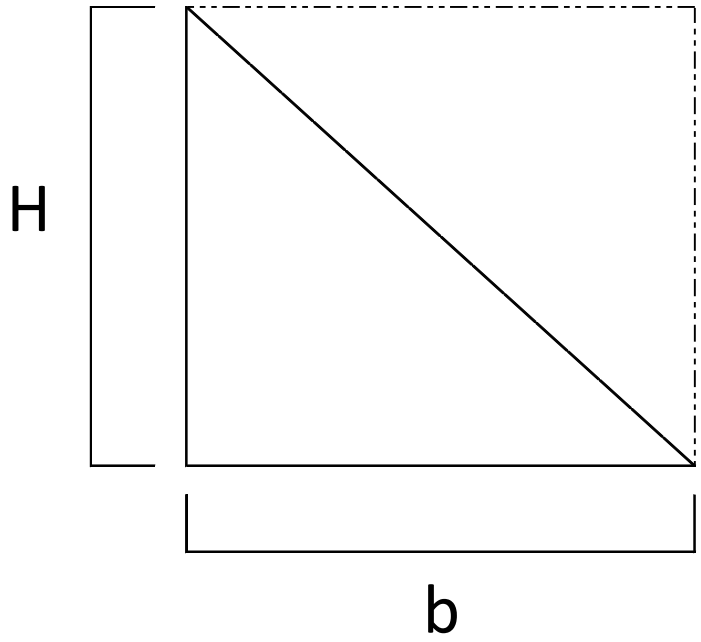
Formula

- The formula for calculating the area of a triangle is:

- $A = \frac{1}{2} b H$

Area of a Triangle

Think of a triangle as a rectangle that has been cut in ***half*** diagonally.



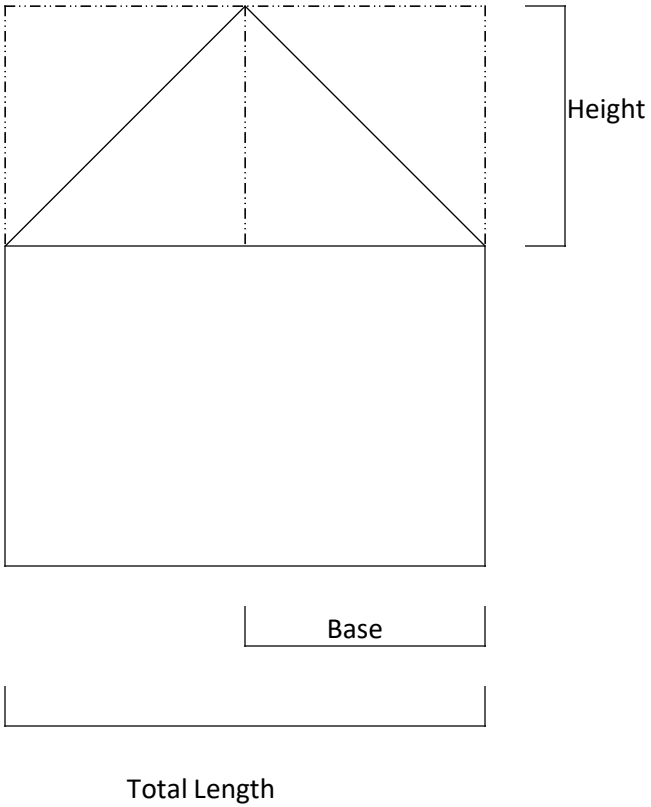
Area of a Triangle

$A = \frac{1}{2} b H$

Area of a Triangle

- A carpenter would need to know how to measure and calculate the *area* of a triangle in order to install siding on the gable end of a roof.

Calculating the Area of a Gable End

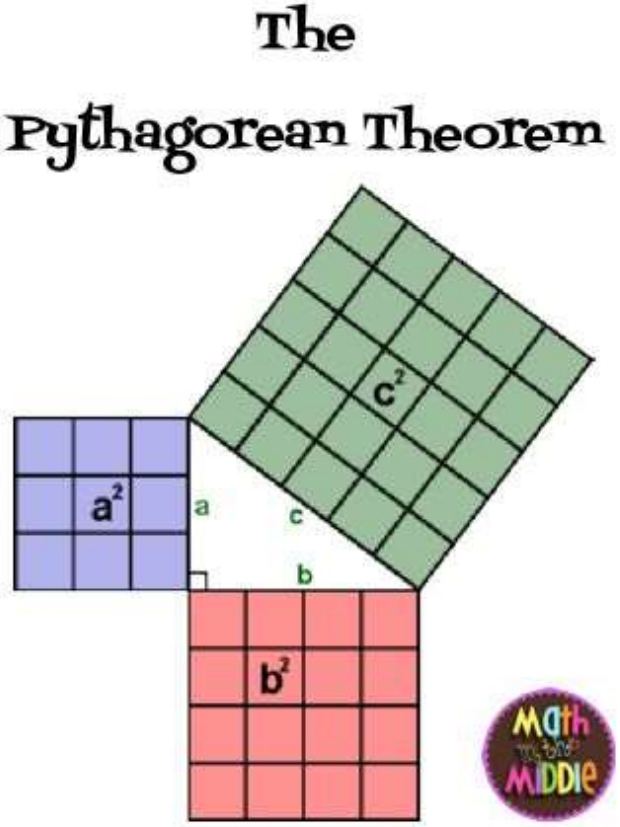


Area

- Square or Rectangle:
  - A = L x W
- Triangle
  - A = ½ x B x H

Properties of Right Triangles

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



Properties of Right Triangles

- When working with non-right triangles, always divide them into two separate right triangles.