

Pythagorean Theorem

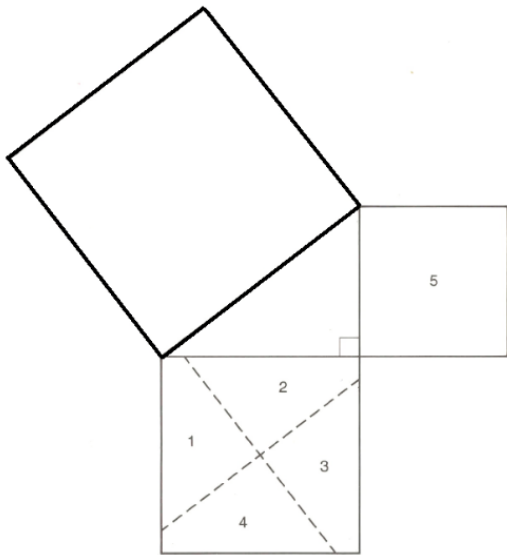
The **Pythagorean Theorem** is a formula used to find a missing side of a right triangle. It can only be used for right triangles.

The **legs** of a right triangle are the two smaller sides. The **hypotenuse** is always the largest side and is always across from the right angle.

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

Why does it work?

$$(x^2)^{-3} = x^{-6} = \frac{1}{x^6} \quad | \quad x^{-8} = \frac{1}{x^8}$$



Cut out the two smaller squares and cut along the dotted lines to create 5 parts.

Try to place all five pieces inside the larger square.

What can we conclude?

