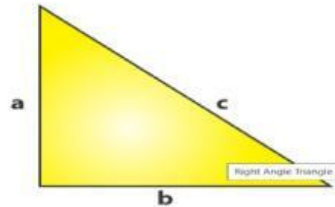




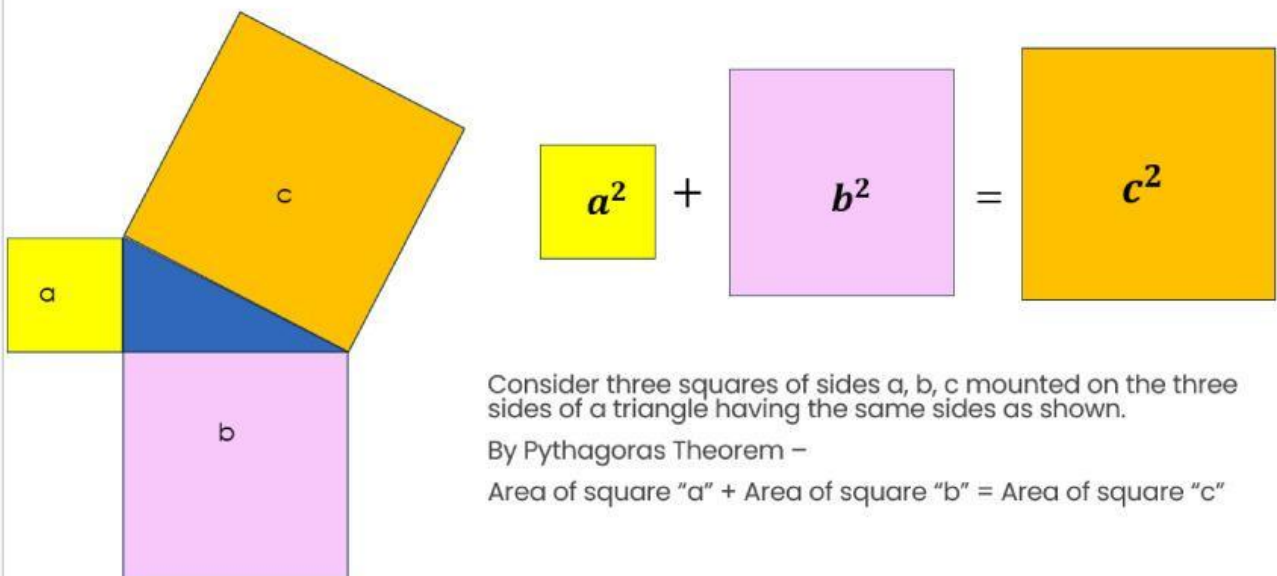
## What to Know

Pythagorean theorem states that "In a right-angled triangle, the square of the hypotenuse side is equal to the sum of squares of the other two sides".



The theorem can be written as an equation relating the lengths of the sides  $a$ ,  $b$  and the hypotenuse  $c$ , sometimes called the **Pythagorean equation**:

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



Consider three squares of sides  $a$ ,  $b$ ,  $c$  mounted on the three sides of a triangle having the same sides as shown.

By Pythagoras Theorem –

Area of square "a" + Area of square "b" = Area of square "c"