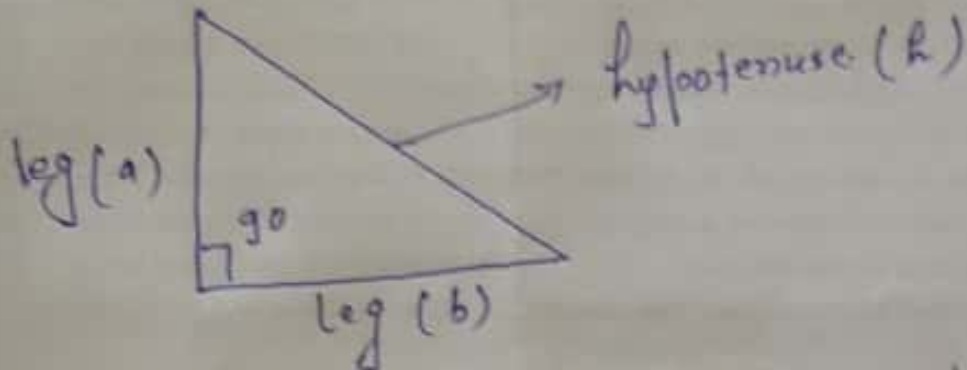
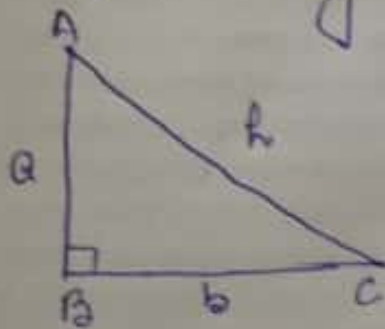


Right-Angled triangle and Pythagoras Property

A triangle whose angle is right is called right-angled triangle.



Pythagoras property:- In a right-angled triangle, the square on the hypotenuse is the sum of the squares of remaining two sides.

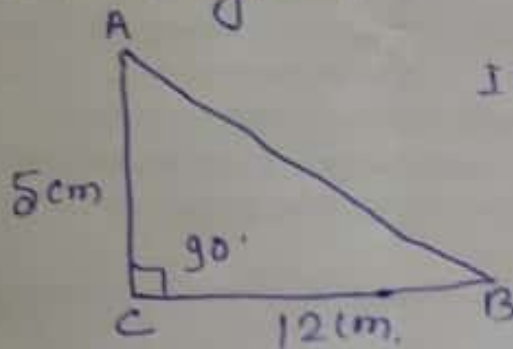


$$h^2 = a^2 + b^2$$

$$a^2 = h^2 - b^2$$

$$b^2 = h^2 - a^2$$

Ex In $\triangle ABC$, $\angle C = 90^\circ$, $AC = 5\text{ cm}$, $BC = 12\text{ cm}$.
find the length of AB .



In $\triangle ACB$, $\angle C = 90^\circ$

$$AB^2 = AC^2 + BC^2$$

$$= 5^2 + 12^2$$

$$= 25 + 144$$

$$AB = \sqrt{169} = 13\text{ cm}$$

Ans