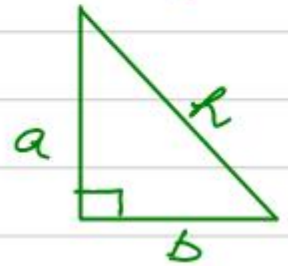
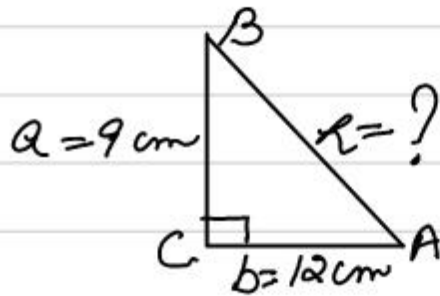


Pythagoras theorem - In a right Δ square of hypotenuse is equal to sum of squares of other two sides

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



①



Sol In rt Δ BCA

$$h^2 = a^2 + b^2 \quad (\text{Pythagoras theorem})$$

$$= 9^2 + 12^2$$

$$= 81 + 144$$

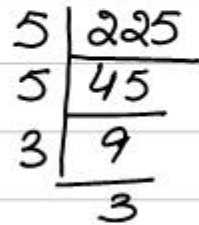
$$\Rightarrow h^2 = 225$$

$$\Rightarrow h = \sqrt{225}$$

$$= \sqrt{3^2 \times 5^2}$$

$$= 3 \times 5$$

$$= 15 \text{ cm}$$



②

Sol In rt Δ BCA

$$AB^2 = BC^2 + AC^2 \quad (\text{Pythagoras theorem})$$

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

$$26^2 = 10^2 + b^2$$

$$\Rightarrow b^2 = 676 - 100$$

$$\Rightarrow b = \sqrt{576}$$

$$= \sqrt{3^2 \times 2^2 \times 2^2 \times 2^2}$$

$$= 3 \times 2 \times 2 \times 2$$

$$= 24 \text{ cm}$$

