



Properties of Triangles Ex 15.5 Q5

Answer :

In the given triangle, the largest side is 6 cm.

We know that in a right – angled triangle, the sum of the squares of the smaller sides should be equal to the square of the largest side.

Therefore,

$$3^2 + 4^2 = 9 + 16 = 25$$

But,

$$6^2 = 36$$

$$\Rightarrow 3^2 + 4^2 \neq 6^2$$

Hence, the given triangle is not a right – angled triangle.

Properties of Triangles Ex 15.5 Q6

Answer :

(i) We know that in a right – angled triangle, the square of the largest side is equal to the sum of the squares of the smaller sides.

Here, the larger side is c, which is 25 cm.

$$c^2 = 625$$

We have :

$$a^2 + b^2 = 7^2 + 24^2 = 49 + 576 = 625 = c^2$$

Thus, the given triangle is a right triangle.

(ii) We know that in a right – angled triangle, the square of the largest side is equal to the sum of the squares of the smaller sides.

Here, the larger side is c, which is 18 cm.

$$c^2 = 324$$

We have :

$$a^2 + b^2 = 9^2 + 16^2 = 81 + 256 = 337 \neq c^2$$

Thus, the given triangle is not a right triangle.

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