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.

********** END **********