

Class 10 Mathematics - Triangles

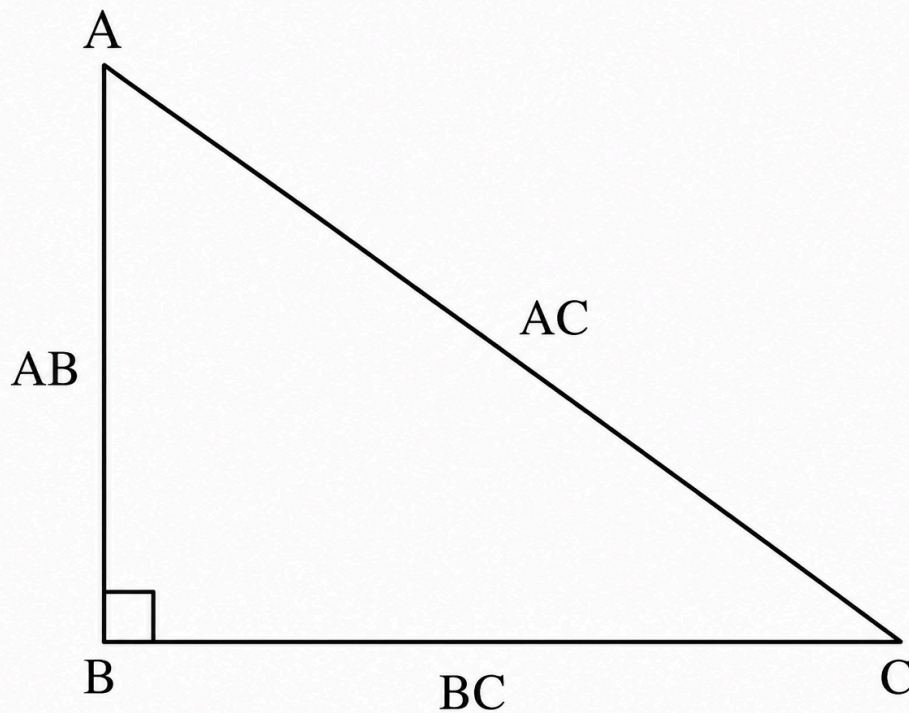
Name: _____

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Advanced Worksheet 4

Questions

For Questions 1 - 4, refer to the figure:



1. In a right triangle, the sides are 6 cm, 8 cm and 10 cm. Verify whether the triangle satisfies the Pythagoras Theorem.
2. A triangle has sides 5 cm, 12 cm and 13 cm. Verify whether it is a right triangle.
3. A triangle has sides 7 cm, 24 cm and 25 cm. Verify whether it is a right triangle.
4. A triangle has sides 8 cm, 15 cm and 17 cm. Verify whether it is a right triangle.
5. State the Converse of Pythagoras Theorem.
6. If the square of the longest side of a triangle is equal to the sum of the squares of the other two sides, what type of triangle is it?

Answer Key

1. Yes, $6^2 + 8^2 = 10^2$
2. Yes, $5^2 + 12^2 = 13^2$
3. Yes, $7^2 + 24^2 = 25^2$
4. Yes, $8^2 + 15^2 = 17^2$
5. If the square of one side of a triangle equals the sum of the squares of the other two sides, then the angle opposite the first side is a right angle.
6. Right-angled triangle