

Right Angled Triangle Worksheet

1. In a right-angled triangle, one of the sides measures 6 cm, and the hypotenuse measures 10 cm. What is the length of the other side?
2. The lengths of the two sides of a right-angled triangle are 8 cm and 15 cm. Find the length of the hypotenuse.
3. A ladder is leaning against a wall, forming a right-angled triangle with the ground. If the ladder is 13 m long and the base of the ladder is 5 m from the wall, how high does the ladder reach on the wall?
4. The perimeter of a right-angled triangle is 36 cm. If one of the legs is 9 cm and the other is 12 cm, find the length of the hypotenuse.
5. A right-angled triangle has an area of 24 cm^2 and one leg of length 6 cm. Find the length of the other side.
6. The hypotenuse of a right-angled triangle is 17 cm, and one side is 8 cm. Calculate the length of the other side.
7. In a right-angled triangle, the two sides are equal in length, and the hypotenuse is 10 cm. Find the length of each side, giving your answer to two decimal places.
8. The base of a right-angled triangle is 12 cm, and its height is 9 cm. Find the length of the hypotenuse and the area of the triangle.
9. A right-angled triangle has sides of length 7 cm and 24 cm. Find the length of the hypotenuse and the area of the triangle.
10. The hypotenuse of a right-angled triangle is twice as long as the shorter side, and the longer side is 8 cm. Find the lengths of all sides.

Maths with Melissa

Answer Key

1. 8 cm
2. 17 cm
3. 12 m
4. 15 cm
5. 8 cm
6. 15 cm
7. 7.07 cm (each leg)
8. Hypotenuse: 15 cm; Area: 54 cm^2
9. Hypotenuse: 25 cm; Area: 84 cm^2
10. Shorter leg: 8 cm; Longer leg: $8\sqrt{3} \text{ cm}$ ($\approx 13.86 \text{ cm}$); Hypotenuse: 16 cm