

Pythagoras: Subtracting and Finding Missing Sides Worksheet

Solve each problem using the Pythagorean theorem. Show your working. Round answers to two decimal places where necessary.

1. A right-angled triangle has one side of length 13 cm (hypotenuse) and another side of 5 cm. What is the length of the missing side?
2. In a right-angled triangle, the hypotenuse is 10 m and one leg is 6 m. Find the length of the other leg.
3. A ladder is 15 feet long and reaches a window 9 feet above the ground. How far is the base of the ladder from the wall?
4. The diagonal of a rectangular field is 25 m, and one side is 7 m. Find the length of the other side.
5. A triangle has sides of 17 cm (hypotenuse) and 8 cm. What is the length of the third side?
6. The hypotenuse of a right triangle is 20 cm, and one of the shorter sides is 16 cm. Find the length of the other shorter side.
7. In a right-angled triangle, the hypotenuse is 26 cm and one side is 24 cm. What is the length of the other side?
8. A right triangle has a hypotenuse of 29 cm and one leg of 21 cm. Find the missing leg.
9. The diagonal of a television screen is 40 inches, and the height is 24 inches. What is the width of the screen?
10. A rectangular garden has a diagonal path of 50 m and a width of 30 m. Find the length of the garden.

Answer Key

1. 12 cm
2. 8 m
3. 12 feet
4. 24 m
5. 15 cm
6. 12 cm
7. 10 cm
8. 20 cm
9. 32 inches
10. 40 m