

CHAPTER-2 | The Baudhāyana-pythagoras Theorem

QUIZ PART-04

1. In a right-angled triangle, the side opposite the right angle is called the:

A. Base
B. Perpendicular
C. Hypotenuse
D. Vertex (C)

Explanation : The hypotenuse is always the side opposite the 90° angle.

2. An isosceles right triangle has:

A. Three equal sides
B. Two equal sides
C. No equal sides
D. Four equal sides (B)

Explanation: An isosceles right triangle has two equal sides and one right angle.

3. If the two equal sides of an isosceles right triangle are each 1 unit, the hypotenuse is:

A. 1
B. $\sqrt{2}$
C. 2
D. 4 (B)

Explanation: For sides 1 and 1, the hypotenuse is $\sqrt{2}$.

4. Which angle is present in every right triangle?

A. 45°
B. 60°
C. 90°
D. 120° (C)

Explanation: A right triangle always contains one 90° angle.

5. In a right triangle, the hypotenuse is always the:

A. Shortest side
B. Longest side
C. Equal side
D. Vertical side (B)

Explanation : The side opposite the right angle is always the longest side.

6. If the legs of a right triangle are 6 cm and 8 cm, the hypotenuse is:

A. 10 cm
B. 12 cm
C. 14 cm
D. 100 cm (A)

Explanation : Using the Pythagorean relationship, the hypotenuse is 10 cm.

7. The sides forming the right angle are called the:

A. Legs
B. Hypotenuse
C. Vertices
D. Diagonals (A)

Explanation : The two sides that meet at the 90° angle are called the legs of the triangle.

8. If both legs of an isosceles right triangle are equal, the triangle is:

A. Scalene
B. Equilateral
C. Isosceles
D. Obtuse (C)

Explanation : A triangle with two equal sides is called an isosceles triangle.

9. The hypotenuse is directly opposite the:

A. Acute angle
B. Obtuse angle
C. Reflex angle
D. Right angle (D)

Explanation : The hypotenuse is always opposite the 90° angle.

10. Which shape is mainly discussed in this part of the chapter?

A. Rectangle
B. Circle
C. Isosceles right triangle
D. Pentagon (C)

Explanation : focuses on the hypotenuse of an isosceles right triangle.