1. The ratio of the perpendicular to the hypotenuse is:
   A. sin θ
   B. cos θ
   C. tan θ
   D. csc θ (A)

Explanation : sin θ = Perpendicular / Hypotenuse.

2. If tan **θ** = 3/4, then sin **θ** is:
   A. 3/5
   B. 4/5
   C. 3/7
   D. 5/3 (A)

Explanation: Using $\tan^2\theta + 1 = \sec^2\theta$, we get sin θ = 3/5.

3. If sin **θ** = 3/5, then cos **θ** is:
   A. 4/5
   B. 3/5
   C. 1/5
   D. 2/5 (A)

Explanation: From $\sin^2\theta + \cos^2\theta = 1$, cos θ = 4/5.

4. The ratio of the opposite side to the adjacent side is:
   A. cos θ
   B. sin θ
   C. tan θ
   D. sec θ (C)

Explanation: tan θ = Opposite / Adjacent.

5. sin 45° is:
   A. $1/\sqrt{2}$
   B. 1
   C. 1/2
   D. 3/4 (A)

Explanation : sin 45° = $1/\sqrt{2}$.

6. In a right-angled triangle, if AB = 24 cm, BC = 7 cm, ∠ABC = 90°, then tan C is:
   A. 12/7
   B. 24/7
   C. 20/7
   D. 7/24 (B)

Explanation : tan C = AB / BC = 24/7.

7. The reciprocal of cos **θ** is:
   A. sec θ
   B. csc θ
   C. tan θ
   D. cot θ (A)

Explanation : sec θ = 1 / cos θ.

8. If tan **θ** = 1, then sin **θ** is:
   A. $1/\sqrt{2}$ B. 1/3
   C. 1 D. 1/2 (A)

Explanation : If tan θ = 1, then sin θ = $1/\sqrt{2}$.

9. cos 30° is:
   A. ½
   B. $\sqrt{3}/2$
   C. $1/\sqrt{2}$
   D. 1 (B)

Explanation : cos 30° = $\sqrt{3}/2$.

10. In a right-angled triangle, if the base is 3 cm and height is 4 cm, the hypotenuse is:
    A. 5 cm
    B. 6 cm
    C. 7 cm
    D. 4 cm (A)

Explanation : Using Pythagoras' theorem, hypotenuse = $\sqrt{(3^2 + 4^2)} = \sqrt{(9 + 16)} = 5$ cm.

मिशन ज्ञान
जब चाहें, जहाँ चाहें, जैसे चाहें!
100% FREE!
Video COURSES | QUIZ | PDF | TEST SERIES
Download Mission Gyan App