| Board –Foundation | Class – 8th | Topic – Trigonometric Ratio |
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1. In a right-angled triangle, which side is always opposite the right angle?

   (a) Base (b) Hypotenuse

   (c) Perpendicular (d) Altitude

2. What is the value of $\sin 30°$ ?

   (a) 0 (b) 1

   (c) $\frac{1}{2}$ (d) $\frac{\sqrt{3}}{2}$

3. Which trigonometric ratio is defined as $\frac{\text{Opposite side}}{\text{Hypotenuse}}$ ?

   (a) Cosine (b) Sine

   (c) Tangent (d) Cotangent

4. If $\cos A = \frac{4}{5}$, what is the value of $\sin A$ ?

   (a) $\frac{3}{5}$ (b) $\frac{4}{3}$

   (c) $\frac{5}{4}$ (d) $\frac{3}{4}$

5. What is the value of $\tan 45°$ ?

   (a) 0 (b) 1

   (c) $\sqrt{3}$ (d) $\frac{1}{\sqrt{3}}$

6. Which of the following is equal to $\frac{\sin \theta}{\cos \theta}$ ?

   (a) $\cot \theta$ (b) $\tan \theta$

   (c) $\sec \theta$ (d) $\theta$

7. The value of $\sin^2 \theta + \cos^2 \theta$ is always:

   (a) 0 (b) 1

   (c) 2 (d) $\frac{1}{2}$

8. If the sides adjacent and opposite to angle A are equal in a right-angled triangle, what is the value of sin A ?

(a) 1 (b) $\frac{1}{2}$

(c) $\frac{1}{\sqrt{2}}$ (d) $\sqrt{3}$

9. Which of the following is the reciprocal of sine?

(a) Cosine (b) Secant

(c) Cosecant (d) Cotangent

10. What is the value of cos 60° ?

(a) 1 (b) 0

(c) $\frac{1}{2}$ (d) $\frac{\sqrt{3}}{2}$

11. If tan A = 1, what is the value of angle A ?

(a) 0° (b) 30°

(c) 45° (d) 60°

12. Which trigonometric ratio is defined as $\frac{\text{Adjacent side}}{\text{Opposite side}}$ ?

(a) Cotangent (b) Sine

(c) Cosine (d) Tangent

13. The value of tan 30° is:

(a) 1 (b) $\frac{1}{\sqrt{3}}$

(c) $\sqrt{3}$ (d) 0

14. Which of the following is NOT a trigonometric ratio?

(a) Sine (b) Cosine

(c) Tangent (d) Gradient

15. What is the value of sin 90° ?

(a) 0 (b) 1

(c) $\frac{1}{2}$ (d) $\sqrt{3}$