

CLASS 10 APPLICATIONS OF TRIGONOMETRY

10 MCQs

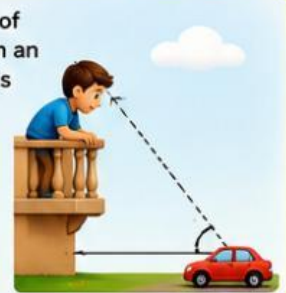
1 The angle formed by the line of sight with the horizontal when an object is above the observer is called:

- A) Angle of Depression
- B) Angle of Elevation
- C) Complementary Angle
- D) Reflex Angle



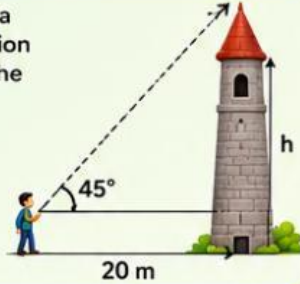
2 The angle formed by the line of sight with the horizontal when an object is below the observer is called:

- A) Angle of Elevation
- B) Acute Angle
- C) Angle of Depression
- D) Right Angle



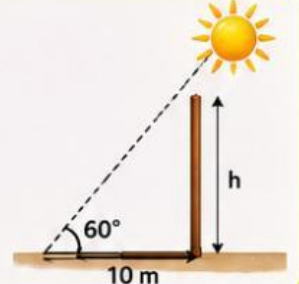
3 A man observes the top of a tower at an angle of elevation of 45° . If he is 20 m from the tower, the height of the tower is:

- A) 10 m
- B) 20 m
- C) 30 m
- D) 40 m



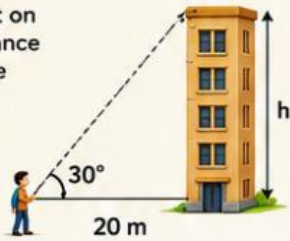
4 If the angle of elevation of the sun is 60° and a pole casts a shadow of length 10 m, the height of the pole is:

- A) $10\sqrt{3}$ m
- B) $5\sqrt{3}$ m
- C) 10 m
- D) 20 m



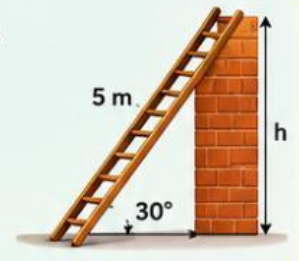
5 The angle of elevation of the top of a building from a point on the ground is 30° . If the distance from the building is 20 m, the height of the building is:

- A) $20\sqrt{3}$ m
- B) $10\sqrt{3}$ m
- C) $20/\sqrt{3}$ m
- D) $10/\sqrt{3}$ m



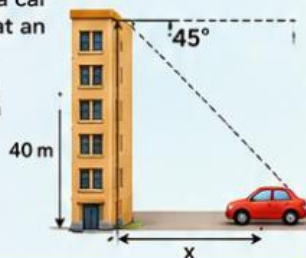
6 A ladder 5 m long reaches the top of a wall and makes an angle of 30° with the ground. The height of the wall is:

- A) 2.5 m
- B) $2.5\sqrt{3}$ m
- C) 5 m
- D) $5\sqrt{3}$ m



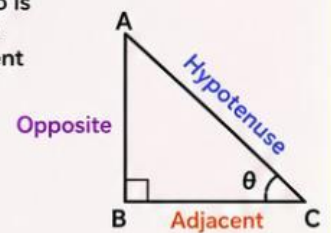
7 From the top of a building, a car on the ground is observed at an angle of depression of 45° . If the building is 40 m high, the distance of the car from the building is:

- A) 20 m
- B) 40 m
- C) 60 m
- D) 80 m



8 Which trigonometric ratio is generally used when the opposite side and adjacent side are involved?

- A) Sine
- B) Cosine
- C) Tangent
- D) Secant



9 The line joining the observer's eye and the object being viewed is called:

- A) Horizontal Line
- B) Vertical Line
- C) Line of Sight
- D) Tangent



10 A tree casts a shadow 8 m long when the angle of elevation of the sun is 45° . The height of the tree is:

- A) 4 m
- B) 8 m
- C) 12 m
- D) 16 m

