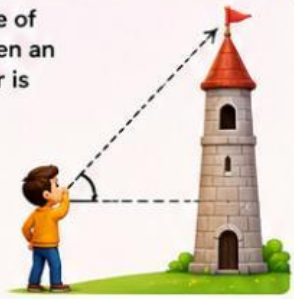
CLASS 10
APPLICATIONS OF TRIGONOMETRY
10 MCQs

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

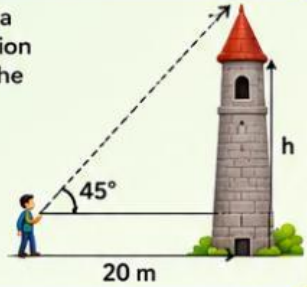


2 The angle formed by the line of sight with the horizontal when an object is below the observer is called:

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

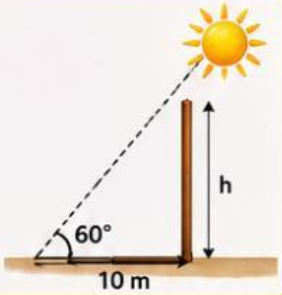
3 A man observes the top of a tower at an angle of elevation of 45°. If he is 20 m from the tower, the height of the tower is:

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



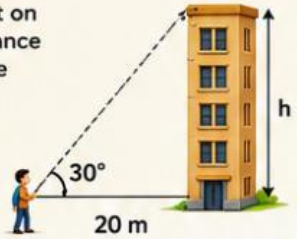
4 If the angle of elevation of the sun is 60° and a pole casts a shadow of length 10 m, the height of the pole is:

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



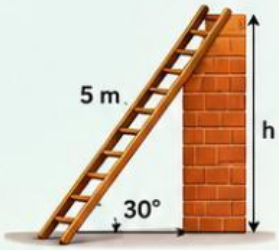
5 The angle of elevation of the top of a building from a point on the ground is 30°. If the distance from the building is 20 m, the height of the building is:

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



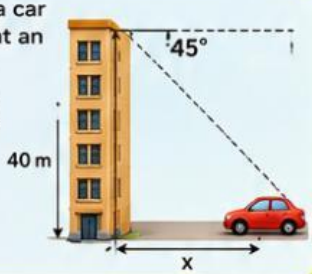
6 A ladder 5 m long reaches the top of a wall and makes an angle of 30° with the ground. The height of the wall is:

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



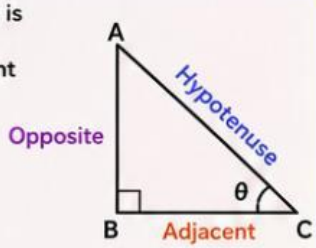
7 From the top of a building, a car on the ground is observed at an angle of depression of 45°. If the building is 40 m high, the distance of the car from the building is:

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

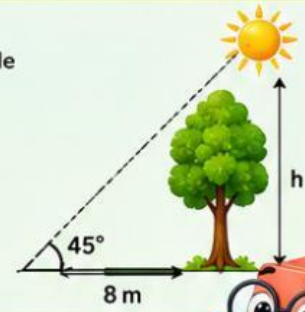


9 The line joining the observer's eye and the object being viewed is called:

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



Ramaswamy Kodam

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