CHAPTER-2 | Lines and Angles

QUIZ PART-17

1. Can angles describe the slopes of the slabs on the toy?
   A. Yes
   B. No
   C. Only for horizontal slopes
   D. Only for vertical slopes (A)

Explanation : The angles formed by the slopes of the slabs can describe the steepness, affecting how fast the balls roll.

2. What are the arms of the angle in the toy's slope?
   A. The sides of the toy
   B. The slabs and the toy base
   C. The protractor lines
   D. The ball's path (B)

Explanation: The arms of the angle are formed by the slanting slabs and the horizontal base of the toy.

3. Which arm of the angle is visible in the toy's setup?
   A. The horizontal slab
   B. The slanting slab
   C. The angle between the slabs
   D. Both arms (B)

Explanation: In the toy's setup, the slanting slab is clearly visible as one arm of the angle.

4. Can angles be used to describe the door's opening?
   A. Yes
   B. No
   C. Only if it's completely open
   D. Only if it's half open (A)

Explanation: The angle formed by the door's movement can describe how far the door is opened, with the vertex at the hinge.

5. What is the vertex of the angle when a door opens?
   A. The door B. The hinge
   C. The doorframe D. The handle (B)

Explanation : The vertex of the angle formed when the door opens is the hinge, where the door rotates.

6. What are the arms of the angle when the door opens?
   A. The door and the handle
   B. The doorframe and the door
   C. The top and bottom of the door
   D. The doorframe and the floor (B)

Explanation : The arms of the angle are formed by the doorframe and the door itself.

7. How does the angle affect the speed of Vidya's swing?
   A. Higher angles lead to slower speed
   B. Higher angles lead to faster speed
   C. It has no effect on the speed
   D. It makes the swing go higher (B)

Explanation : The greater the angle, the greater the potential energy and faster the swing moves.

8. What angle is formed when Vidya swings from a higher position?
   A. 90° B. Acute angle
   C. 180° D. Obtuse angle (B)

Explanation : When Vidya swings from a higher position, the angle formed between the swing and the vertical rope is acute.

9. How is the angle in Vidya's swing described?
   A. It stays the same
   B. It changes continuously
   C. It's always 90°
   D. It's fixed at 60° (B)

Explanation : The angle changes continuously as the swing moves back and forth, depending on the height.

10. Can angles describe the rotation of an insect in the image?
    A. Yes
    B. No
    C. Only when the insect rotates fully
    D. Only if it rotates in one direction (A)

Explanation : Angles can describe the amount of rotation of an object, including the insect's movement, by measuring the rotational degree.