

CHAPTER-4 | Exploring Some Geometric Themes

QUIZ PART-05

1. Visualisation means —

- A. Measuring objects
- B. Imagining objects mentally
- C. Drawing only on paper
- D. Counting faces of solids (B)

Explanation : Visualisation is the ability to imagine and manipulate objects in the mind.

2. According to Nikola Tesla, he improved his ideas mainly by —

- A. Building models first
- B. Drawing diagrams immediately
- C. Working entirely in his imagination
- D. Taking measurements (C)

Explanation: Tesla described building and improving devices mentally before actual construction.

3. While practising visualisation, students are encouraged to —

- A. Use calculators
- B. Draw on paper
- C. Imagine and discuss ideas mentally
- D. Memorise formulas only (C)

Explanation: The activity focuses on mental imagination rather than drawing.

4. Reading your name backwards by sight mainly develops —

- A. Calculation skills
- B. Visualisation skills
- C. Measurement skills
- D. Estimation skills (B)

Explanation: The activity strengthens the ability to mentally visualize shapes and letters.

5. If the four corners of a square are cut off at the midpoints of adjacent sides, the remaining figure has —

- A. 4 sides
- B. 6 sides
- C. 8 sides
- D. 10 sides (C)

Explanation : Cutting all four corners of a square creates an octagon with 8 sides.

6. An octagon is a polygon with —

- A. 6 sides
- B. 7 sides
- C. 8 sides
- D. 9 sides (C)

Explanation : The prefix “octa” means eight.

7. When the corners of an equilateral triangle are cut off at one-third marks, the resulting figure is a —

- A. Pentagon
- B. Hexagon
- C. Octagon
- D. Nonagon (B)

Explanation : Each corner cut adds a new side, producing a hexagon.

8. An equilateral triangle has —

- A. Two equal sides
- B. Three equal sides
- C. Four equal sides
- D. No equal sides (B)

Explanation : All three sides of an equilateral triangle are equal.

9. Marking the sides of a square into thirds and cutting off all four corners leaves a —

- A. Hexagon
- B. Pentagon
- C. Octagon
- D. Triangle (C)

Explanation : The square changes into an eight-sided figure (octagon).

10. Which skill is most important in the chapter “Visualising Solids”?

- A. Memorisation
- B. Mental imagination of shapes
- C. Algebraic calculations
- D. Data collection (B)

Explanation : The chapter focuses on mentally creating and transforming shapes without drawing them.