

CHAPTER-2 | Lines and Angles

QUIZ PART-03

1. Which of the following defines a line segment?
- A part of a line that extends infinitely in both directions
 - A part of a line that has two endpoints
 - A ray that extends in one direction
 - A point in space

Explanation: A line segment is a part of a line with two fixed endpoints.

2. How many lines can be drawn passing through a single point?
- One
 - Infinite
 - Two
 - None

Explanation: Infinite lines can pass through any given point, as they can extend in any direction.

3. What is the main characteristic of a ray?
- It has one endpoint and extends infinitely in both directions
 - It has two endpoints
 - It has one endpoint and extends infinitely in one direction
 - It has a fixed length

Explanation: A ray has one endpoint and extends infinitely in one direction.

4. In the figure, points A, B, and C are on the same line. What type of points are these?
- Collinear points
 - Non-collinear points
 - Parallel points
 - None of the above

Explanation: Points A, B, and C lie on the same straight line, making them collinear points.

5. Which of these represents a line in geometry?
- A line with two endpoints
 - A line extending infinitely in both directions
 - A line with one endpoint
 - A curve

Explanation: A line extends infinitely in both directions and has no endpoints.

6. The sequence of points A, B, and C, where B lies between A and C, is an example of:
- Collinear points
 - Non-collinear points
 - Angle points
 - None of the above

Explanation: Collinear points lie on the same straight line. In this case, B is between A and C on the line.

7. Which of these is true about a line segment?
- It has infinite length
 - It has two fixed endpoints
 - It extends infinitely in one direction
 - It has only one endpoint

Explanation: A line segment has two fixed endpoints, and it has a specific length.

8. In the figure, points M, P, and Q are shown. Point M lies on both line segments MP and PQ. Point P lies on line segment MP and line segment PQ. Which point is common to both segments?
- M
 - P
 - Q
 - None

Explanation: Point P is common to both line segments MP and PQ, as it lies on both.

9. How many lines can be drawn that pass through two given points?
- One
 - Infinite
 - Two
 - None

Explanation: One line can be drawn through two points, as a unique line can connect any two distinct points.

10. The number of line segments passing through two given points depends on:
- The number of points
 - The direction of the line
 - The number of lines
 - The position of the points

Explanation: The number of line segments passing through two points depends on the position of the points, as a unique line segment can connect them.