

CHAPTER-6 | Lines and Angles

QUIZ PART-01

1. What is the measure of a complementary angle to 30° ?
- A. 60°
B. 150°
C. 135°
D. 105° (A)

Explanation: Complementary angles are two angles that add up to 90° . If one angle is 30° , the other must be $90^\circ - 30^\circ = 60^\circ$

2. What do we call the pair of two angles whose sum is 180° ?
- A. Vertically opposite angles
B. Complementary angles
C. Adjacent angles
D. Supplementary angles (D)

Explanation: Supplementary angles are two angles that sum up to 180° , like the two angles shown on a straight line

3. What is the name for angles that share a common vertex and a common side?
- A. Supplementary angles
B. Complementary angles
C. Adjacent angles
D. Vertical angles (C)

Explanation: Adjacent angles are two angles that share a common vertex and a common side but do not overlap

4. Which of the following is the definition of a line segment?
- A. A line that extends indefinitely in both directions
B. A line with no endpoints
C. A part of a line with two endpoints
D. A part of a line with one endpoint (C)

Explanation: A line segment has two endpoints and can be measured as it is finite in length

5. Which of the following is true for a straight angle?
- A. It is less than 90°
B. It is equal to 90°
C. It is more than 180°
D. It is equal to 180° (D)

Explanation: A straight angle is an angle formed by a straight line and is always equal to 180°

6. Which type of angle is greater than 90° but less than 180° ?
- A. Acute angle
B. Right angle
C. Obtuse angle
D. Reflex angle (C)

Explanation: An obtuse angle measures more than 90° but less than 180°

7. If two lines are parallel, what is the relationship between the corresponding angles?
- A. They are complementary
B. They are supplementary
C. They are equal
D. They are different (C)

Explanation: When two parallel lines are intersected by a transversal, the corresponding angles are equal

8. What are vertically opposite angles?
- A. Angles that form a linear pair
B. Angles formed by two intersecting lines that are equal
C. Angles that add up to 90°
D. Angles that share a common side (B)

Explanation: Vertically opposite angles are formed when two lines intersect, and these angles are always equal

9. What does the term "collinear points" mean?
- A. Points that lie on the same plane
B. Points that do not lie on the same plane
C. Points that lie on the same line
D. Points that do not lie on the same line (C)

Explanation: Collinear points are points that lie on the same straight line

10. What is the sum of the interior angles of a triangle?
- A. 360°
B. 180°
C. 90°
D. 270° (B)

Explanation: The sum of the interior angles of any triangle is always 180° , which is a fundamental property in geometry