CHAPTER-2 | Lines and Angles

QUIZ PART-11

1. If two angles share a common vertex and their rays lie on top of each other, what can we conclude?
   A. The angles are equal
   B. The angles are complementary
   C. The angles are supplementary
   D. The angles are adjacent (A)

Explanation : If two angles share a common vertex and their rays lie on top of each other, the angles are equal in size.

2. Which angle is greater between ∠AOB and ∠XOY?
   A. ∠AOB is greater
   B. ∠XOY is greater
   C. Both are equal
   D. Cannot determine without a diagram (A)

Explanation: In the given case, ∠AOB is greater than ∠XOY based on their size comparison.

3. In the figure, what type of angles are ∠AOB and ∠XOB?
   A. Complementary
   B. Vertical angles
   C. Adjacent angles
   D. Alternate interior angles (C)

Explanation: ∠AOB and ∠XOB are adjacent angles as they share a common ray OB and vertex O.

4. The angle formed between rays OX and OY is known as:
   A. Acute angle
   B. Right angle
   C. Reflex angle
   D. Angle ∠XOY (D)

Explanation: The angle formed between rays OX and OY is specifically denoted as ∠XOY.

5. When comparing ∠XOB and ∠XOC, which one is greater?
   A. ∠XOB is greater
   B. ∠XOC is greater
   C. Both angles are equal
   D. Cannot determine without a diagram (B)

Explanation : ∠XOC is greater than ∠XOB based on the angle formed between the rays.

6. What is the relationship between ∠XOY and ∠AOB?
   A. They are complementary angles
   B. ∠XOY is greater
   C. ∠AOB is greater
   D. They are equal angles (D)

Explanation : ∠XOY and ∠AOB are equal angles as per the provided comparison in the chapter.

7. If an angle measures 45°, what type of angle is it?
   A. Acute angle
   B. Right angle
   C. Obtuse angle
   D. Reflex angle (A)

Explanation : An angle that measures less than 90° is classified as an acute angle.

8. The measure of a right angle is:
   A. 0°
   B. 45°
   C. 90°
   D. 180° (C)

Explanation : A right angle always measures exactly 90°.

9. Which of the following is an example of vertical angles?
   A. ∠ABC and ∠DEF
   B. ∠PQR and ∠STU
   C. ∠1 and ∠2 formed by two intersecting lines
   D. ∠3 and ∠4 in a straight line (C)

Explanation : Vertical angles are the opposite angles formed when two lines intersect, such as ∠1 and ∠2.

10. What is the measure of an angle that is exactly halfway between a right angle and a straight angle?
    A. 45°
    B. 90°
    C. 135°
    D. 180° (C)

Explanation : The angle halfway between a right angle (90°) and a straight angle (180°) is 135°.