

CHAPTER-6 | Lines and Angles

QUIZ PART-04

1. In the figure, if $x + y = w + z$, then what can be concluded?

- A. AOB is a triangle
- B. AOB is a straight line
- C. AOB is an angle
- D. AOB is a circle (B)

Explanation: Based on the property of angles and the equation provided, AOB must form a straight line, as the sum of the angles equals a linear pair.

2. What does the angle ROS equal if rays OS lies between rays OP and OR?

- A. $\angle ROS = \frac{1}{2} (\angle QOS - \angle POS)$
- B. $\angle ROS = \angle QOS + \angle POS$
- C. $\angle ROS = 90^\circ$
- D. $\angle ROS = \angle QOS$ (A)

Explanation: According to the figure and angle relationships, the formula provided correctly relates $\angle ROS$ as half the difference between $\angle QOS$ and $\angle POS$.

3. If ray OR is perpendicular to line PQ, what is the measure of $\angle POR$?

- A. 90°
- B. 180°
- C. 45°
- D. 0° (A)

Explanation: By definition, perpendicular rays form a right angle, which measures 90° .

4. In the figure, if POQ is a straight line and ray OR is perpendicular to PQ, which angle is a right angle?

- A. $\angle POR$
- B. $\angle QOS$
- C. $\angle ROS$
- D. $\angle QOR$ (A)

Explanation: Since ray OR is perpendicular to PQ, $\angle POR$ is a right angle.

5. If angle $XYZ = 64^\circ$ and XY is extended to point P, and ray YQ bisects $\angle ZYP$, what is the measure of $\angle XYQ$?

- A. 32°
- B. 64°
- C. 128°
- D. 16° (A)

Explanation: Since ray YQ bisects $\angle ZYP$, it divides it equally. Hence, angle $\angle XYQ = (64^\circ) / 2 = 32^\circ$

6. If ray YQ bisects $\angle ZYP$, what is the reflex angle $\angle QYP$?

- A. 128°
- B. 180°
- C. 64°
- D. 32° (A)

Explanation: The reflex angle $\angle QYP$ is the remaining part of the full circle, which is $180^\circ - 32^\circ = 128^\circ$

7. What is the sum of $\angle ROS$ and $\angle QOS$ in the figure where ray OR is perpendicular to PQ?

- A. 90°
- B. 180°
- C. 64°
- D. 360° (B)

Explanation: The sum of the angles on a straight line is always 180° . Since OR is perpendicular to PQ, these two angles form a linear pair.

8. In the given figure, which angles are vertically opposite?

- A. $\angle x$ and $\angle W$
- B. $\angle z$ and $\angle w$
- C. $\angle x$ and $\angle z$
- D. $\angle y$ and $\angle w$ (C)

Explanation: Vertically opposite angles are equal, and $\angle x$ and $\angle z$ are formed by intersecting lines, making them vertically opposite

9. What does the figure with POQ and perpendicular rays represent?

- A. A pair of adjacent angles
- B. A linear pair
- C. A triangle
- D. A circle (B)

Explanation: The figure shows a linear pair of angles formed by the intersecting lines PQ and OR

10. If $\angle XYZ = 64^\circ$ and ray YQ bisects $\angle ZYP$, what is the value of reflex $\angle QYP$?

- A. 180°
- B. 128°
- C. 64°
- D. 32° (B)

Explanation: The reflex angle $\angle QYP$ is the remaining part of the full angle, so it is $180^\circ - 32^\circ = 128^\circ$.