

Circles Geometry Quiz

Grade Level: Grade 8 | **Date:** 2025-11-16 18:34:56

Instructions: Answer all questions. Show your work where applicable.

Question 1: What is the special point in the middle of a circle from which all points on the circle are the same distance?

- A) Corner
- B) Edge
- C) Center
- D) Side

Question 2: Which term describes a line segment that passes through the center of a circle and connects two points on the circle?

- A) Radius
- B) Chord
- C) Diameter
- D) Arc

Question 3: If two diameters of a circle are perpendicular to each other, what is the measure of the angle formed at their intersection point (the center of the circle)?

Answer: _____

Question 4: Consider a circle with center O. If line segments PL and AM are two perpendicular diameters, what type of quadrilateral is formed by connecting the points A, P, M, L in order?

- A) Rectangle
- B) Rhombus
- C) Square
- D) Trapezoid

Answer Key

Question 1: C) Center

Explanation: The center is the point equidistant from all points on the circle.

Question 2: C) Diameter

Explanation: A diameter is a line segment that passes through the center of a circle and has both its endpoints on the circle.

Question 3: 90 degrees (or a right angle)

Explanation: Perpendicular lines always intersect at a 90-degree angle.

Question 4: C) Square

Explanation: Since the diameters are equal in length, bisect each other, and are perpendicular, the quadrilateral formed by their endpoints is a square.