PEP Grade 9 Math — Unit 24: Circles • Unit Test (Basic)

PEP · Grade 9 · Term 1 · Mathematics · Unit Test · Basic

AI-generated practice paper · original study aid, not an official examination paper · 40 questions · 100 points

Name: _____ Date: _____ Score: _____

Answer all questions. This paper is worth 100 points. Show your working where appropriate.

I. Multiple Choice

1. Which of the following best describes a circle?
   A. A polygon with four equal sides
   B. A closed curve where all points are equidistant from the center
   C. A straight line segment with two endpoints
   D. A shape with three vertices and three sides

2. What is the term for the distance from the center of a circle to any point on its edge?
   A. Diameter
   B. Chord
   C. Radius
   D. Arc

3. If a diameter of a circle measures 14 cm, what is the length of the radius?
   A. 7 cm
   B. 14 cm
   C. 21 cm
   D. 28 cm

4. Which of the following is a chord in a circle?
   A. A line from the center to the edge
   B. A line passing through the center and touching two points on the circle
   C. A line segment joining any two points on the circle
   D. A curved part of the circle between two points

5. In a circle, if an angle is formed by two radii, what type of angle is it?
   A. Right angle
   B. Central angle
   C. Inscribed angle
   D. Straight angle

6. What is the measure of a semicircle in degrees?
   A. 90°
   B. 180°
   C. 270°
   D. 360°

7. If a circle has a radius of $\sqrt{3}$ cm, what is the exact area of the circle?
   A. $\sqrt{3}\pi$ cm²
   B. 3π cm²
   C. 6π cm²
   D. 9π cm²

8. Which statement about a tangent to a circle is true?
   A. It intersects the circle at two points
   B. It passes through the center
   C. It touches the circle at exactly one point
   D. It is always longer than the radius

9. Two circles have the same center but different radii. What are they called?
   A. Congruent circles
   B. Concentric circles