Edulyte

CENTRAL ANGLE OF A CIRCLE FORMULA

As the name suggests, the angle that is formed at the midpoint of a circle is the central angle. A central angle has its vertex at the midpoint of the circle and defines the length of an arc (a part of the circle's circumference).

Read more

Q1: Which of the following angles is NOT a central angle?

A: An angle is formed by two radii of the circle.
B: An angle is formed by two chords within the circle.
C: An angle is formed by a tangent line and a radius.
D: An angle is formed by two secant lines outside the circle.

Q2: What is the sum of the central angles in a complete circle?

A: 90 degrees
B: 180 degrees
C: 270 degrees
D: 360 degrees

Q3: What is the sum of the central angles of a hexagon inscribed in a circle?

A: 60 degrees
B: 120 degrees
C: 180 degrees
D: 360 degrees

Q4: An angle that is formed by two chords that have a common endpoint on the circle is

A: Central angle
B: Inscribed angle
C: Interior angle
D: Exterior angle

Q5: An angle that is present inside the circumference of a circle is

A: Central angle
B: Inscribed angle
C: Interior angle
D: Exterior angle

Q6: An angle that is formed outside the circumference of a circle is

A: Central angle
B: Inscribed angle
C: Interior angle
D: Exterior angle

Q7: The measurement of a central angle is _____ proportional to the arc it obstructs on the circumference.

A: Directly
B: Inversely
C: Not
D: None of the above

Q8: Which theorem states the following: The angle formed at the midpoint of a circle is always twice the measurement of the angle obstructed by the arc on the circle's circumference?

A: Central angle theorem
B: Inscribed angle theorem
C: Angle-Arc Theorem
D: None of the above

Q9: Which theorem states the following: The inscribed angle is always half the measurement of the angle that obstructs the same arc.

A: Central angle theorem
B: Inscribed angle theorem
C: Angle-Arc Theorem
D: None of the above

Q10: Which theorem states the following: The measurement of a central angle is directly proportional to the length of the arc that is obstructed by it.

A: Central angle theorem
B: Inscribed angle theorem
C: Angle-Arc Theorem
D: None of the above

Answers

Q1: B - An angle is formed by two chords within the circle.

Q2: D - 360 degrees

Q3: D - 360 degrees

Q4: B - Inscribed angle

Q5: C - Interior angle

Q6: D - Exterior angle

Q7: A - Directly

Q8: A - Central angle theorem

Q9: B - Inscribed angle theorem

Q10: C - Angle-Arc Theorem