

CHAPTER-9 | : Circle

QUIZ
PART-15

Q1. What is the shape of a cyclic quadrilateral with diameters as diagonals?

- A) Rectangle
- B) Square
- C) Rhombus
- D) Parallelogram (A)

Explanation: The quadrilateral is a rectangle.

Q2. What happens when the non-parallel sides of a trapezium are equal?

- A) It becomes cyclic
- B) It becomes a square
- C) It becomes a rhombus
- D) It becomes a rectangle (A)

Explanation: The trapezium becomes cyclic.

3. When two circles intersect, $\angle ACP = \angle QCD$ because of:

- A) Cyclic quadrilateral property
- B) Inscribed angle theorem
- C) Alternate angle theorem
- D) Pythagoras theorem (B)

Explanation: The inscribed angle theorem applies here.

4. What is true for opposite angles in a cyclic quadrilateral?

- A) They are complementary
- B) They are supplementary
- C) They are equal
- D) They are right angles (B)

Explanation: Opposite angles are supplementary.

5. A quadrilateral with diameters as diagonals is always:

- A) Rhombus
- B) Rectangle
- C) Square
- D) Parallelogram (B)

Explanation: The quadrilateral is a rectangle.

6. In a cyclic quadrilateral, the sum of all angles is:

- A) 180°
- B) 360°
- C) 90°
- D) 270° (B)

Explanation: The sum of angles in a cyclic quadrilateral is 360° .

7. In a cyclic quadrilateral, the opposite angles are:

- A) Equal
- B) Supplementary
- C) Complementary
- D) Right angles (B)

Explanation: Opposite angles are supplementary.

8. The central angle is always twice the:

- A) Chord length
- B) Angle at the circumference
- C) Opposite angle
- D) Segment length (B)

Explanation: The central angle is twice the angle at the circumference.

9. In a cyclic quadrilateral, if one angle is 70° , the opposite angle is:

- A) 90°
- B) 110°
- C) 180°
- D) 70° (B)

Explanation: Opposite angles are supplementary, so the opposite angle is 110° .

10. The sum of opposite angles in a cyclic quadrilateral is always:

- A) 180°
- B) 360°
- C) 270°
- D) 90° (A)

Explanation: The sum of opposite angles is always 180° .