

CHAPTER-8 | : Quadrilaterals

QUIZ PART-05

1. If two parallel lines are intersected by a transversal, what is formed by the bisectors of the interior angles?

- A. A triangle
B. A rectangle
C. A rhombus
D. A square (B)

Explanation: The quadrilateral formed by the bisectors of the interior angles of two parallel lines intersected by a transversal is always a rectangle.

2. In a quadrilateral formed by the bisectors of interior angles of two parallel lines intersected by a transversal, what can be concluded about the angles of the quadrilateral?

- A. All angles are 90°
B. All angles are acute
C. All angles are obtuse
D. All angles are right angles (A)

Explanation: In this quadrilateral, each interior angle of the bisected angles is 90° , thus forming a rectangle.

3. What is the property of the angles in a rectangle formed by the bisectors of the interior angles of two parallel lines intersected by a transversal?

- A. All angles are acute
B. All angles are obtuse
C. Opposite angles are equal
D. Adjacent angles are supplementary (D)

Explanation: In a rectangle, adjacent angles are supplementary, meaning they add up to 180° .

Q4. In the figure where two parallel lines are intersected by a transversal and the bisectors of the interior angles form a quadrilateral, what shape is formed?

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

Explanation: The quadrilateral formed by the bisectors of the interior angles of two parallel lines intersected by a transversal is a rectangle.

5. If two parallel lines are intersected by a transversal, and the bisectors of the interior angles form a rectangle, what is the relationship between the bisectors?

- A. They are perpendicular to each other
B. They are parallel to each other
C. They are equal in length
D. They are not related (A)

Explanation: The bisectors of the interior angles form right angles with each other, making them perpendicular to each other.

6. In the diagram formed by two parallel lines and a transversal, what quadrilateral is formed by the bisectors of the interior angles?

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

Explanation: The bisectors of the interior angles of two parallel lines intersected by a transversal form a rectangle.

7. If the bisectors of interior angles of two parallel lines intersected by a transversal form a quadrilateral, what type of quadrilateral is it?

- A. Square
B. Rectangle
C. Rhombus
D. Trapezium (B)

Explanation: The quadrilateral formed by the bisectors of the interior angles of parallel lines intersected by a transversal is always a rectangle.

8. What is the angle relationship in a rectangle formed by the bisectors of the interior angles of parallel lines intersected by a transversal?

- A. All angles are 60°
B. Opposite angles are 90°
C. All angles are equal
D. Adjacent angles are 45° (B)

Explanation: In the rectangle formed, opposite angles are 90° , which is a defining property of a rectangle.

9. In the quadrilateral formed by the bisectors of the interior angles of two parallel lines intersected by a transversal, what is true about the diagonals?

- A. They are perpendicular
B. They bisect each other at 90°
C. They are equal
D. They are unequal (C)

Explanation: The diagonals of the rectangle formed by the bisectors of the interior angles are equal.

10. If a quadrilateral is formed by the bisectors of the interior angles of two parallel lines intersected by a transversal, what can be concluded about the quadrilateral?

- A. It is a rhombus
B. It is a square
C. It is a rectangle
D. It is a parallelogram (C)

Explanation: The quadrilateral formed is a rectangle, as the bisectors of the interior angles of two parallel lines intersected by a transversal form a rectangle.