

Understanding Quadrilaterals

Question 1.

The opposite sides of a parallelogram are of _____ length.

- (a) not equal
- (b) different
- (c) equal
- (d) none of these

Answer: (c) equal

Question 2.

In the quadrilateral ABCD, the diagonals AC and BD are equal and perpendicular to each other. What type of a quadrilateral is ABCD?

- (a) A square
- (b) A parallelogram
- (c) A rhombus
- (d) A trapezium

Answer: (a) A square

Question 3.

If ABCD is an isosceles trapezium, what is the measure of $\angle C$?

- (a) $\angle B$
- (b) $\angle A$
- (c) $\angle D$
- (d) 90°

Answer: (c) $\angle D$

Question 4.

Which of the following is true for the adjacent angles of a parallelogram?

- (a) they are equal to each other
- (b) they are complementary angles
- (c) they are supplementary angles
- (d) none of these.

Answer: (c) they are supplementary angles

Question 5.

State the name of a regular polygon of 6 sides.

- (a) pentagon
- (b) hexagon
- (c) heptagon
- (d) none of these

Answer: (b) hexagon

Question 6.

The diagonal of a rectangle is 10 cm and its breadth is 6 cm. What is its length?

- (a) 6 cm
- (b) 5cm
- (c) 8cm
- (d) 4cm

Answer: (c) 8cm

Question 7.

The perimeter of a parallelogram is 180 cm. If one side exceeds the other by 10 cm, what are the sides of the parallelogram?

- (a) 40 cm, 50 cm
- (b) 45 cm each
- (c) 50 cm each
- (d) 45 cm, 50 cm

Answer: (a) 40 cm, 50 cm

Question 8.

A _____ is both 'equiangular' and 'equilateral'.

- (a) regular polygon
- (b) triangle

- (c) quadrilateral
- (d) none of these

Answer: (a) regular polygon

Question 9.

Which of the following quadrilaterals has two pairs of adjacent sides equal and diagonals intersecting at right angles?

- (a) square
- (b) rhombus
- (c) kite
- (d) rectangle

Answer: (b) rhombus

Question 10.

Which one of the following is a regular quadrilateral?

- (a) Square
- (b) Trapezium
- (c) Kite
- (d) Rectangle

Answer: (a) Square

Question 11.

What do you call a parallelogram which has equal diagonals?

- (a) A trapezium
- (b) A rectangle
- (c) A rhombus
- (d) A kite

Answer: (b) A rectangle

Question 12.

The sides of a pentagon are produced in order. Which of the following is the sum of its exterior angles?

- (a) 540°
- (b) 180°
- (c) 720°
- (d) 360°

Answer: (d) 360°

Question 13.

In a square ABCD, the diagonals bisect at O. What type of a triangle is AOB?

- (a) An equilateral triangle.
- (b) An isosceles but not a right angled triangle.
- (c) A right angled but not an isosceles triangle.
- (d) An isosceles right angled triangle.

Answer: (d) An isosceles right angled triangle.

Question 14.

Which of the parallelograms has all sides equal and diagonals bisect each other at right angle?

- (a) square
- (b) rectangle
- (c) rhombus
- (d) trapezium.

Answer: (c) rhombus

Question 15.

A diagonal of a rectangle is inclined to one side of the rectangle at 25° . What is the measure of the acute angle between the diagonals?

- (a) 25°
- (b) 40°
- (c) 50°
- (d) 55°

Answer: (c) 50°

Question 16.

The _____ of a rhombus are perpendicular bisectors of one another.

- (a) angles
- (b) sides
- (c) diagonals
- (d) none of these

Answer: (c) diagonals

Question 17.

ABCD is a parallelogram. The angle bisectors of $\angle A$ and $\angle D$ meet at O. What is the measure of $\angle AOD$?

- (a) 45°
- (b) 90°
- (c) 75°
- (d) 180°

Answer: (b) 90°

Question 18.

The sum of the measures of the three angles of a triangle is _____.

- (a) 360°
- (b) 210°
- (c) 180°
- (d) none of these

Answer: (c) 180°

Question 19.

How many diagonals does a rectangle have?

- (a) 2
- (b) 1
- (c) 0
- (d) none of these

Answer: (a) 2

Question 20.

Which of the following quadrilaterals has two pairs of adjacent sides equal and diagonals intersecting at right angles?

- (a) square
- (b) rhombus
- (c) kite
- (d) rectangle

Answer: (c) kite
