Quadrilaterals

Question 1.
A diagonal of a Rectangle is inclines to one side of the rectangle at an angle of 25°. The Acute Angle between the diagonals is :
(a) 115°
(b) 50°
(c) 40°
(d) 25°

Answer: (b) 50°

Question 2.
The diagonals of a rectangle PQRS intersects at O. If ∠QOR = 44°, ∠OPS =?
(a) 82°
(b) 52°
(c) 68°
(d) 75°

Answer: (c) 68°

Question 3.
If angles A, B, C and D of the quadrilateral ABCD, taken in order, are in the ratio 3:7:6:4, then ABCD is
(a) rhombus
(b) parallelogram
(c) trapezium
(d) kite

Answer: (c) trapezium

Question 4.
All the angles of a convex quadrilateral are congruent. However, not all its sides are congruent. What type of quadrilateral is it?
(a) Parallelogram
(b) Square
(c) Rectangle
(d) Trapezium

Answer: (c) Rectangle

Question 5.
In a Quadrilateral ABCD, AB = BC and CD = DA, then the quadrilateral is a
(a) Triangle
(b) Kite
(c) Rhombus
(d) Rectangle

Answer: (b) Kite

Question 6.
The angles of a quadrilateral are $(5x)°$, $(3x + 10)°$, $(6x – 20)°$ and $(x + 25)°$. Now, the measure of each angle of the quadrilateral will be
(a) 115°, 79°, 118°, 48°
(b) 100° 79°, 118°, 63°
(c) 110°, 84°, 106°, 60°
(d) 75°, 89°, 128°, 68°

Answer: (a) 115°, 79°, 118°, 48°

Question 7.
The diagonals of rhombus are 12 cm and 16 cm. The length of the side of rhombus is:
(a) 12 cm
(b) 16 cm
(c) 8 cm
(d) 10 cm

Answer: (d) 10 cm

Question 8.
In quadrilateral PQRS, if $\angle P = 60°$ and $\angle Q : \angle R : \angle S = 2 : 3 : 7$, then $\angle S =$

(a) 175°
(b) 210°
(c) 150°
(d) 135°

Answer: (a) 175°

Question 9.
In parallelogram ABCD, if $\angle A = 2x + 15°$, $\angle B = 3x – 25°$, then value of x is:
(a) 91°
(b) 89°
(c) 34°
(d) 38°

Answer: (d) 38°

Question 10.
If ABCD is a trapezium in which AB || CD and AD = BC, then:
(a) $\angle A = \angle B$
(b) $\angle A > \angle B$
(c) $\angle A < \angle B$
(d) None of the above

Answer: (a) $\angle A = \angle B$

Question 11.
The diagonals of a parallelogram:
(a) Equal
(b) Unequal
(c) Bisect each other
(d) Have no relation

Answer: (c) Bisect each other

Question 12.
The sum of all the angles of a quadrilateral is equal to:
(a) 180°
(b) 270°

(c) 360°
(d) 90°

Answer: (c) 360°

Question 13.
If an angle of a parallelogram is two-third of its adjacent angle, the smallest angle of the parallelogram is:
(a) 81°
(b) 54°
(c) 108°
(d) 72°

Answer: (d) 72°

Question 14.
In a parallelogram ABCD, if $\angle A = 75°$, then $\angle B = ?$
(a) 95°
(b) 80°
(c) 105°
(d) 15°

Answer: (c) 105°

Question 15.
Angles of a quadrilateral are in the ratio 3 : 6 : 8: 13. The largest angle is :
(a) 178°
(b) 156°
(c) 90°
(d) 36°

Answer: (b) 156°

Question 16.
Perimeter of a parallelogram is 22 cm. If the longer side, measures 6.5 cm, the measure of the shorter side will be
(a) 4.5 cm
(b) 6.5 cm
(c) 2.5 cm
(d) 3.0 cm

Answer: (a) 4.5 cm

Question 17.
If ABCD is a Parallelogram with 2 Adjacent angles $\angle A = \angle B$, then the parallelogram is a
(a) Rhombus
(b) Triangle
(c) Rectangle
(d) Square

Answer: (c) Rectangle

Question 18.
Which of the following is not a parallelogram?
(a) Rectangle
(b) Rhombus
(c) Square
(d) Trapezium

Answer: (d) Trapezium

Question 19.
In a parallelogram the sum of two consecutive angles is
(a) 360°
(b) 100°
(c) 180°
(d) 90°

Answer: (c) 180°

Question 20.
Two angles of a quadrilateral are 50° and 80° and other two angles are in the ratio 8 : 15. Find the measure of the remaining two angles.
(a) 100°, 130°
(b) 140°, 90°
(c) 80°, 150°
(d) 70°, 160°

Answer: (c) 80°, 150°

Question 21.
he opposite angles of a parallelogram are $(3x – 2)°$ and $(50 – x)°$ the measure of these angles is _____.
(a) 140°, 140°
(b) 20°, 160°
(c) 37°, 143°
(d) 37°, 37°

Answer: (d) 37°, 37°

Question 22.
The diagonals AC and BD of a parallelogram ABCD intersect each other at the point O. If $\angle DAC = 32°$, $\angle AOB = 70°$, then $\angle DBC$ is equal to:
(a) 32°
(b) 88°
(c) 24°
(d) 38°

Answer: (d) 38°

Question 23.
Each angle of rectangle is:
(a) More than 90°
(b) Less than 90°
(c) Equal to 90°
(d) Equal to 45°

Answer: (c) Equal to 90°

Question 24.
A diagonal of a parallelogram divides it into two congruent:
(a) Square
(b) Parallelogram
(c) Triangles
(d) Rectangle

Answer: (c) Triangles
