

QB365 Question Bank Software Study Materials

Geometry 50 Important 1 Marks Questions With Answers (Book Back and Creative)

9th Standard

Maths

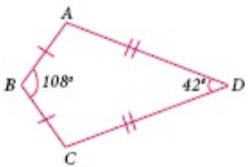
Total Marks : 50

Multiple Choice Question

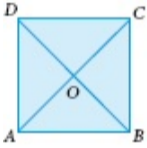
50 x 1 = 50

- 1) The exterior angle of a triangle is equal to the sum of two _____.
- (a) Exterior angles **(b) Interior opposite angles** (c) Alternate angles (d) Interior angles

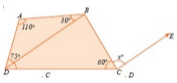
- 2) In the quadrilateral ABCD, $AB = BC$ and $AD = DC$ Measure of $\angle BCD$ is _____.



- (a) 150° (b) 30° **(c) 105°** (d) 72°
- 3) ABCD is a square, diagonals AC and BD meet at O. The number of pairs of congruent triangles with vertex O are _____.



- (a) 6** (b) 8 (c) 4 (d) 12
- 4) In the given figure $CE \parallel DB$ then the value of x° is _____.



- (a) 45° (b) 30° (c) 75° **(d) 85°**
- 5) The correct statement out of the following is _____.
- (a) $\triangle ABC \cong \triangle DEF$ (b) $\triangle ABC \cong \triangle DEF$ (c) $\triangle ABC \cong \triangle FDE$ **(d) $\triangle ABC \cong \triangle FED$**
- 6) If the diagonal of a rhombus are equal, then the rhombus is a _____.
- (a) Parallelogram but not a rectangle (b) Rectangle but not a square **(c) Square** (d) Parallelogram but not a square
- 7) If bisectors of $\angle A$ and $\angle B$ of a quadrilateral ABCD meet at O, then $\angle AOB$ is _____.
- (a) $\angle C + \angle D$ **(b) $\frac{1}{2}(\angle C + \angle D)$** (c) $\frac{1}{2}\angle C + \frac{1}{3}\angle D$ (d) $\frac{1}{3}\angle C + \frac{1}{2}\angle D$.
- 8) The interior angle made by the side in a parallelogram is 90° then the parallelogram is a _____.
- (a) rhombus **(b) rectangle** (c) trapezium (d) kite
- 9) Which of the following statement is correct?
- (a) Opposite angles of a parallelogram are not equal. **(b) Adjacent angles of a parallelogram are complementary.**
- (c) Diagonals of a parallelogram are always equal. (d) Both pairs of opposite sides of a parallelogram are always equal.

- 10) The angles of the triangle are $3x-40$, $x+20$ and $2x-10$ then the value of x is _____.

(a) 40° **(b) 35°** (c) 50° (d) 45°

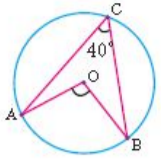
- 11) PQ and RS are two equal chords of a circle with centre O such that $\angle POQ = 70^\circ$, then $\angle ORS =$ _____.

(a) 60° (b) 70° **(c) 55°** (d) 80°

- 12) A chord is at a distance of 15 cm from the centre of the circle of radius 25 cm. The length of the chord is _____.

- (a) 25 cm (b) 20 cm **(c) 40 cm** (d) 18 cm

13) In the figure, O is the centre of the circle and $\angle ACB = 40^\circ$ then $\angle AOB =$ _____.

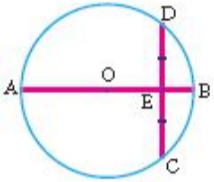


- (a) 80°** (b) 85° (c) 70° (d) 65°

14) In a cyclic quadrilaterals ABCD, $\angle A = 4x$, $\angle C = 2x$ the value of x is _____.

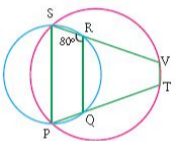
- (a) 30°** (b) 20° (c) 15° (d) 25°

15) In the figure, O is the centre of a circle and diameter AB bisects the chord CD at a point E such that $CE = ED = 8$ cm and $EB = 4$ cm. The radius of the circle is _____.



- (a) 8cm (b) 4cm (c) 6cm **(d) 10cm**

16) In the figure, PQRS and PTVS are two cyclic quadrilaterals, If $\angle QRS = 100^\circ$, then $\angle TVS =$ _____.

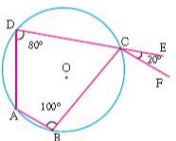


- (a) 80°** (b) 100° (c) 70° (d) 90°

17) If one angle of a cyclic quadrilateral is 75° , then the opposite angle is _____.

- (a) 100° **(b) 105°** (c) 85° (d) 90°

18) In the figure, ABCD is a cyclic quadrilateral in which DC produced to E and CF is drawn parallel to AB such that $\angle ADC = 80^\circ$ and $\angle ECF = 20^\circ$, then $\angle BAD = ?$

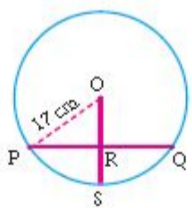


- (a) 100° (b) 20° **(c) 120°** (d) 110°

19) AD is a diameter of a circle and AB is a chord. If $AD = 30$ cm and $AB = 24$ cm then the distance of AB from the centre of the circle is _____.

- (a) 10cm **(b) 9cm** (c) 8cm (d) 6cm

20) In the given figure, If $OP = 17$ cm $PQ = 30$, cm and OS is perpendicular to PQ, then RS is _____.



- (a) 10 cm (b) 6 cm (c) 7 cm **(d) 9 cm**

21) It is not possible to construct a triangle when its sides are _____

- (a) 8.2 cm, 3.5 cm, 6.5 cm **(b) 6.3 cm, 3.1 cm, 3.2 cm** (c) 7 cm, 8 cm, 10 cm (d) 4 cm, 6 cm, 6 cm

22) The angle sum of a convex polygon with number of sides 7 is _____

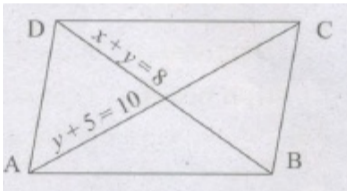
- (a) 900°** (b) 1080° (c) 1444° (d) 720°

23) What is the name of a regular polygon of six sides?

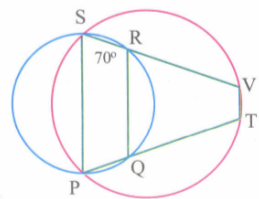
- (a) Square (b) Equilateral triangle **(c) Regular hexagon** (d) Regular octagon

- 24) One angle of a parallelogram is a right angle. The name of the quadrilateral is _____
 (a) square (b) **rectangle** (c) rhombus (d) kite
- 25) If all the four sides of a parallelogram are equal and the adjacent angles are of 120° and 60° , then the name of the quadrilateral is _____
 (a) rectangle (b) square (c) **rhombus** (d) kite
- 26) In a parallelogram $\angle A : \angle B = 1 : 2$ Then $\angle A$
 (a) 30° (b) **60°** (c) 45° (d) 90°
- 27) Which of the following is a formula to find the sum of interior angles of a quadrilateral of n-sides?
 (a) $\frac{n}{2} \times 180$ (b) $\left(\frac{n+1}{2}\right)180^\circ$ (c) $\left(\frac{n-1}{2}\right)180^\circ$ (d) **$(n-2)180^\circ$**
- 28) Diagonal of which of the following quadrilaterals do not bisect it into two congruent triangles?
 (a) rhombus (b) **trapezium** (c) square (d) rectangle
- 29) The point of concurrency of the medians of a triangle is known as _____
 (a) circumcentre (b) incentre (c) orthocentre (d) **centroid**

- 30) ABCD is a parallelogram as shown. Find x and y.



- (a) 1, 7 (b) 2, 6 (c) **3, 5** (d) 4, 4
- 31) The angle subtend by equal chords of a circle at the centre is _____
 (a) Complementary (b) Supplementary (c) **equal** (d) unequal
- 32) If the length of a chord decreases, then its distance from the centre _____
(a) Increases (b) decreases (c) same (d) cannot say
- 33) The angle subtend by a semicircle at the centre is _____
 (a) 60° (b) 90° (c) 120° (d) **180°**
- 34) The angle subtend by a semicircle at the remaining part of the circumference is _____
 (a) 60° (b) **90°** (c) 120° (d) 180°
- 35) In the figure, PQRS and PTVS are two cyclic quadrilaterals, If $\angle QRS = 70^\circ$, then $\angle TVS =$ _____



- (a) **70°** (b) 110° (c) 80° (d) 90°
- 36) If sum of two opposite angles of a cyclic quadrilateral is _____
 (a) 45° (b) 90° (c) **180°** (d) 360°
- 37) The distance between the longest chord of a circle and the centre is _____
 (a) 1 (b) **0** (c) 2 (d) 5
- 38) The perpendicular line from the centre of the circle to the chord divided the chord in the ratio _____
(a) 1: 1 (b) 1: 2 (c) 2: 1 (d) 1: 3

- 39) The angle in a semi circle is _____
(a) 180° (b) **90°** (c) 60° (d) 45°
- 40) An angle is equal to one third of its supplement its measure is equal to _____
(a) 40° (b) 50° (c) **45°** (d) 55°
- 41) The complement of an angle exceeds the angle by 60° . Then the angle is equal to _____
(a) 25° (b) 30° (c) **15°** (d) 35°
- 42) Find the measure of an angle if 6 times its complement is 12° less than twice its supplement _____
(a) 48° (b) 96° (c) 24° (d) 58°
- 43) O is the centre of the circle, AB is the chord and D is midpoint of AB. If the length of CD is 2 cm and the length of chord is 12 cm. What is the radius of the circle?
(a) 10 cm (b) 12 cm (c) 15 cm (d) 18 cm
- 44) ABCD is a cyclic quadrilateral given that $\angle ADB + \angle DAB = 120^\circ$ and $\angle ABC + \angle BDA = 145^\circ$. Find the value of $\angle CDB$ _____
(a) 75° (b) 115° (c) 35° (d) **45°**
- 45) In the given figure AB is one of the diameters of the circle and OC is perpendicular to it through the center of AC is $7\sqrt{2}$ cm then what is the area of the circle in cm^2 _____
(a) 24.5 (b) 49 (c) 98 (d) **154**
- 46) ABCD is a parallelogram E is the midpoint of AB and CE bisects $\angle BCD$. Then $\angle DEC$ is _____
(a) 60° (b) 90° (c) 100° (d) **120°**
- 47) Angle in a semicircle is _____
(a) obtuse angle (b) **right angle** (c) an acute angle (d) supplementary
- 48) Angle in a minor segment is _____
(a) an acute angle (b) **an obtuse angle** (c) a right angle (d) a reflexive angle
- 49) Angle in a major segment is _____
(a) an acute angle (b) an obtuse angle (c) a right angle (d) reflexive angle
- 50) If one angle of a cyclic quadrilateral is 70° then the angle opposite to it is _____
(a) 20° (b) **110°** (c) 140° (d) 160°