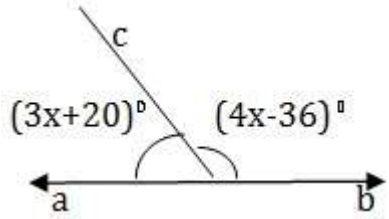
# Geometry

Q1. Find the distance between the points A (-4, 7) and B (2, 5).
(a) 5 (b) 6 (c) 6√5 (d) 7
Q2. An angle is one fifth of its supplement. The measure of the angle is
(a) 15° (b) 30° (c) 75° (d) 150°
Q3. An angle is 24° more than its complement. The measure of the angle is:
(a) 57° (b) 47° (c) 53° (d) 66°
Q4. An angle is 32° less than its supplement. The measure of the angle is
(a) 37° (b) 74° (c) 48° (d) 66°
Q5. Two Supplementary angles are in th ratio 3:2. The smaller angle measures:
(a) 108° (b) 81° (c) 72° (d) 66°
Q6. In the given figure, AOB is a straight line, ∠AOC = (3x+20)° and ∠BOC = (4 x-36)°. The value of the x is:




(a) 32° (b) 22° (c) 26° (d) 24°
Q7. In the given figure , AOB is a straight line, ∠ AOC = (3x-8)° and ∠COD =50 and ∠BOD° =(x+10)°. The value of the x is:

(a) 32° (b) 42° (c) 36° (d) 52°
Q8. Two poles of heights 6m and 11m stand vertically on a plane ground. If the distance between their feet is 12m, what is the distance between their tops?
(a) 13 m (b) 14 m (c) 15 m (d) 12.8 m
Q9. The radius of a circle is 13cm and AB is a chord which is at a distance of 12cm from the center. The length of the ladder is:
(a) 35 cm (b) 17.5 cm (c) 25 cm (d) 10 cm
Q10. The lengths of the diagonals of a rhombus are 24cm and 18cm respectively. The length of each side of the rhombus is
(a) 12 cm (b) 9 cm (c) 15 cm (d) 8 cm
Q11. The lengths of the diagonals of a rhombus are 24cm and 18cm respectively. The length of each side of the rhombus is
(a) 12 cm (b) 9 cm (c) 15 cm (d) 8 cm
Q12. AB and CD are two parallel chords of a circle of radius 13 cm such that AB = 10 cm and CD = 24 cm. Find the distance between the chords keeping in mind that both the chords are on the same side.
(a) 9 cm (b) 11 cm (c) 7 cm (d) None of these
Q13. Signs of the abscissa and ordinate of a point in the second quadrant are respectively
(a) +, + (b) +, – (c) -, + (d) -, –
Q14. O is the orthocentre of ΔABC. Then, ∠BOC + ∠BAC is equal to

(a) 90° (b) 120° (c) 135° (d) 180°

Q15. The sum of three altitudes of a triangle is

(a) Equal to the sum of three sides (b) Less than the sum of sides

(c) Greater than the sum of sides (d) Twice the sum of sides

Q16. The equidistant point from the vertices of a triangle is called its

(a) Centroid (b) Incentre (c) Circumcentre (d) Orthocentre

Q17. $\Delta ABC$ is a right angled triangle with AB = 6 cm, AC = 8 cm, $\angle BAC = 90°$. Then, the radius of the incircle is:

(a) 2 cm (b) 3 cm (c) 4 cm (d) 6 cm

Q18. If the median drawn on the base of a triangle is half its base, then the triangle will be

(a) Right-angled (b) Acute-angled (c) Obtuse-angled (d) Equilateral

Q19. The sum of the internal angles of a regular polygon is 1440°. The number of sides of the polygon is

(a) 6 (b) 8 (c) 10 (d) 12

Q20. The sum of all internal angles of a regular polygon whose one external angle is 20° is

(a) 1080° (b) 2880° (c) 3460° (d) 4460°

Q21. ABC is a triangle and the sides AB, BC and CA are produced to E, F and G respectively. If $\angle CBE = \angle ACF = 130°$, then the value of $\angle GAB$ is

(a) 80° (b) 90° (c) 100° (d) 130°

Q22. In $\Delta PQR$, S and T are points on sides PR and PQ respectively such that $\angle PQR = \angle PST$. If PT = 5 cm, PS = 3 cm and TQ = 3 cm, then the length of SR is:

(a) 5 cm (b) 6 cm (c) 31/3 cm (d) 41/3 cm

Q23. In a right angled triangle, the circumcentre of the triangle lies

(a) Inside the triangle (b) Outside the triangle (c) On midpoint of the hypotenuse (d) On one vertex

Q24. If ABC is an equilateral triangle and P, Q, R respectively denote the middle points of AB, BC, CA then

(a) PQ + QR + PR = AB Geometry (b) PQ + QR + PR = 2AB

(c) PQR must be an equilateral triangle (d) PQR must be a right angled triangle

# Answer key

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| 1 | C | 6 | B | 11 | B | 16 | C | 21 | C |
| 2 | B | 7 | A | 12 | C | 17 | A | 22 | C |
| 3 | A | 8 | A | 13 | C | 18 | A | 23 | C |
| 4 | B | 9 | D | 14 | D | 19 | C | 24 | C |
| 5 | C | 10 | C | 15 | B | 20 | B | | |