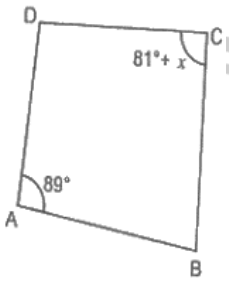
CLASS 9 MATHS MCQ BASED QUESTIONS

1. Point (0, –7) lies
   (a) in the fourth quadrant (b) on the y-axis
   (c) on the x –axis (d) in the second quadrant

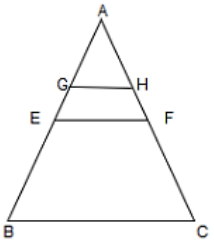
2. The sides of a triangle are 50 cm, 78 cm and 112 cm. The smallest altitude is
   (a) 20 cm (b) 40 cm
   (c) 30 cm (d) 50 cm

3. For what value of x in the figure, points A, B, C and D are concyclic?



   (a)10° (b) 9°
   (c) 12° (d) 11°

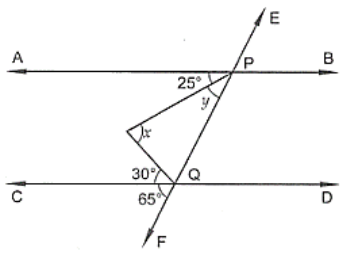
4. E and F are the mid-points of sides AB and AC resp. of the ΔABC ; G and H are the mid-points of the sides AE and AF resp. of the ΔAEF. If GH = 1.8cm, Find BC.



   a) 6 cm b) 7.2 Cm
   c) 7.5cm d) 6.5 cm

5. If $\frac{5-\sqrt{3}}{2+\sqrt{3}} = x + y\sqrt{3}$, then
   a) x = 13, y = 7 b) x = -13, y = - 7
   c) x = -13, y = 7 d) x = 13, y = -7

6. In Figure, AB and CD are parallel lines and transversal EF intersects them at P and Q respectively. If $\angle APR$ = 25°, RQC = 30° and $\angle CQF$ = 65°, then
   a) x = 50°, y = 45° b) x = 60°, y = 35°
   c) x = 35°,y = 60° d) x = 55°, y = 40°

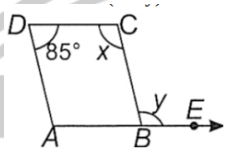


7. x = 2, y = 5 is a solution of the linear equation
   a) x + y = 7 b) 5 x + y = 7
   c) 5x +2y = 7 d) x + 2y = 7

8. When $p(x) = x^4 + 2x^3 - 3x^2 + x - 1$ is divided by $(x - 2)$, the remainder is
   a) 21 b) -1
   c) -15 d) 0

9. The difference between two distinct irrational numbers is always
   a) a rational number b) both rational and irrational number
   c) an irrational number d) an integer

10. ABCD is a parallelogram in which $\angle ADC = 85°$ and side AB is produced to point E as shown in the figure. Find the value of (x + y).

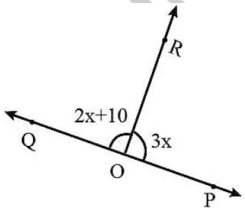


   a) 85° b) 95°
   c) 190° d) 160°

11. The simplest form of $0.12\overline{3}$ is
   a) none of these b) $\frac{41}{333}$
   c) $\frac{41}{330}$ d) $\frac{37}{330}$

12. The graph of the line with abscissa $y = -6$ passes through
   a) (-1, 4) b) (0, 4)
   c) (4, -6) d) (-6, 4)

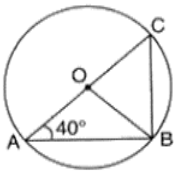
13. Given $\angle POR = 3x$ and $\angle QOR = 2x + 10°$. If ∠POQ is a straight line, then the value of x is



   a) 36° b) 34°
   c) 30° d) 42o

14. An irrational number between 2 and 2.5 is
   a) $\sqrt{22.5}$ b) $\sqrt{12.5}$
   c) $\sqrt{5}$ d) $\sqrt{11}$

15. If $\angle OAB = 40°$, then the measure of $\angle ACB$ is



a) $50°$ b) $80°$
c) $40°$ d) $20°$

16. The point whose abscissa is 4 and this point lies on the x-axis is:
a) (0, 4) b) (4, 0)
c) (4, 4) d) (2, 4)

17. The positive solutions of the equation $ax + by + c = 0$ always lie in the
a) 1st quadrant b) 2nd quadrant
c) 3rd quadrant d) 4th quadrant

18. If $x + y + z = 9$ and $xy + yz + zx = 23$, then the value of $x^3 + y^3 + z^3 - 3xyz$ is
a) 108 b) 180
c) 209 d) 144

19. Assertion (A): If the diagonals of a parallelogram ABCD are equal, then $\angle ABC = 90°$
Reason (R): If the diagonals of a parallelogram are equal, it becomes a rectangle.
a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false.
d) A is false but R is true.

20. Assertion (A): Rational number lying between two rational numbers a and b is $\frac{a+b}{2}$.
Reason (R): There is one rational number lying between any two rational numbers.
a) Both A and R are true and R is the correct explanation of A.
b) Both A and R are true but R is not the correct explanation of A.
c) A is true but R is false.
d) A is false but R is true