SATISH CHANDRA MEMORIAL SCHOOL

PRACTICE QUESTION

PRE-MID/CLASS -IX

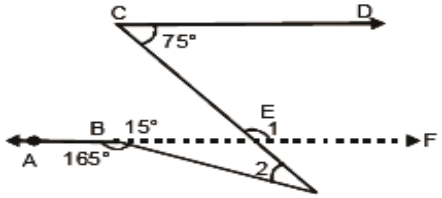
1. Express 0.245245…. as a fraction in the simplest form.

2. The number of unique zeros of $x^2 + 4x + 4$.

(a) 1 (b) 2 (c) 3 (d) 4

3. Factorise: $(a-b)^3 + (b-c)^3 + (c-a)^3$.

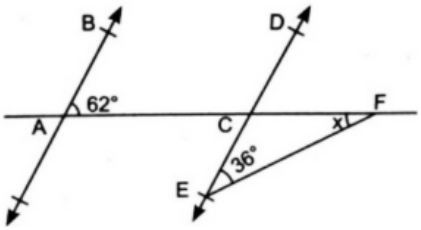
4. In the following figure AB || CD. Find the measure of ∠BOC.



5. Simplify 11.45656565… ÷ 2.6767….

6. If PQ and RS are two intersecting lines which meet at point O. If angle POR : angle ROQ = 5:7. Find all the angles.

7. In the given figure, AB II ED, find x.



8. Find the value of x in $\sqrt[3]{44x-7} - 5 = 0$.

9. The value of k, if $(x-1)$ is a factor of $4x^3 + 3x^2 - 4x + k$, is

(a) 1 (b) 2 (c) -3 (d) 3

10. If $x^2 + \frac{1}{x^2} = 18$, then find the value of $x + \frac{1}{x}$.

Choose the correct answer out of the following choices.
(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

11. **Assertion (A):** The points A(2, 3) and B(2, – 4), both lie on the line parallel to y-axis.

Reason (R): The point A(2, 3) lies in the first quadrant.

12. **Assertion (A):** If angles 'x' and 'y' form a linear pair of angles and x = 70°, then y = 110°.

Reason (R): Sum of linear pair of angles is always 180°.

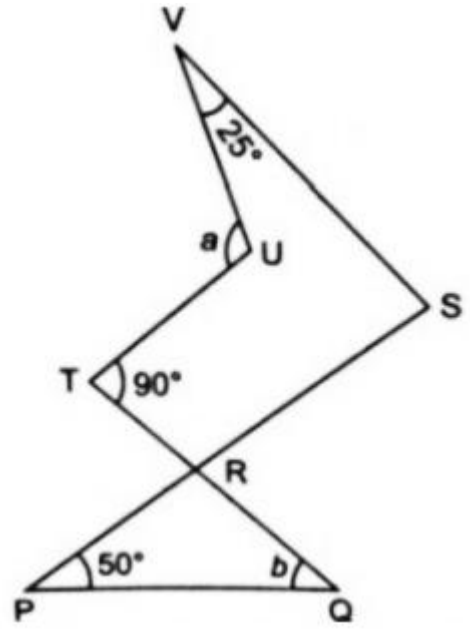
13. **Assertion (A):** If $p(x) = x^2 - 4x + 3$, then 3 and 1 are the zeroes of the polynomial $p(x)$.

Reason (R): Number of zeroes of a polynomial cannot exceed its degree.

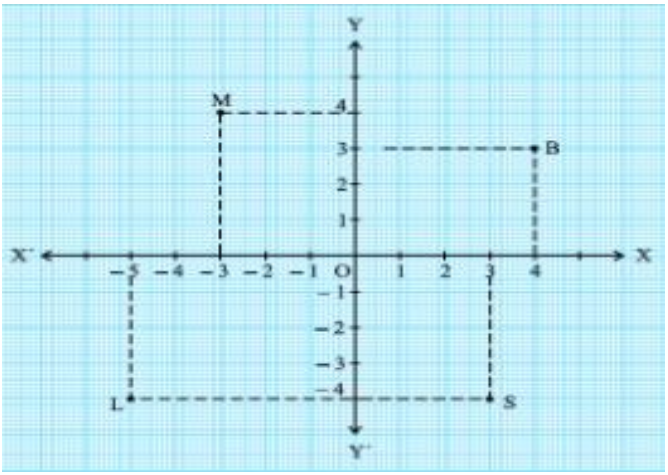
14. **Assertion (A):** The sum of two irrational numbers $3+\sqrt{5}$ and $5-\sqrt{5}$ is rational number.

Reason (R): The sum of two irrational numbers is always an irrational number.

15. In the given figure, TU II SR and TR II SV, then find a and b.



16. From the given figure, complete the following statements:



(i) The coordinate and quadrant of B.

(ii) The coordinate and quadrant of M.

(iii) The coordinate and quadrant of L.

(iv) The coordinate and quadrant of S.

(v) The distance between L and S.