

SATISH CHANDRA MEMORIAL SCHOOL

CLASS TEST

FM = 15

IX (09/06/25)

1. Find the angle which is four times its complement is 10° less than twice its complement. 1

- a) 15° b) 10° c) 25° d) 5°

2. If $x + y = 5$ and $xy = 4$, find $(x - y)$. 1

- a) 3 b) 5 c) 4 d) 6

3. Determine the $\frac{p}{q}$ form of $0.1254545454.....$ 1

- a) $\frac{69}{55}$ b) $\frac{1242}{9900}$ c) $\frac{1222}{9900}$ d) $\frac{89}{550}$

4. **Assertion (A):** The bisectors of the angles of a linear pair are at right angles.

Reason (R): If the sum of two adjacent angles is 180° , then the non-common arms of the angles are in a straight line. 1

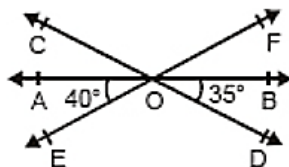
a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).

b) Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of Assertion (A).

c) Assertion (A) is true but Reason (R) is false.

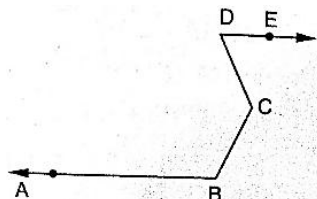
d) Assertion (A) is false but Reason (R) is true.

5. In the given figure, lines AB, CD and EF intersect at O. Find the measure of $\angle AOC$, $\angle COF$. 2

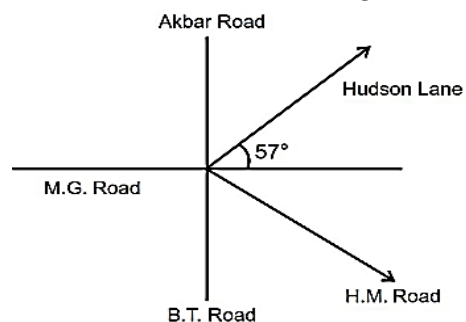


6. If $f(x) = 5x^2 - 4x + 5$, find $f(-1) + f(0) + f(1)$. 2

7. In the given figure, AB is parallel to DE. Prove that $\angle ABC + \angle BCD = 180^\circ + \angle CDE$. 3



7. Rishi and Shima are cousins and both went to visit Mughal Garden. Before going, they searched the location of their destination on a map. During searching, they found on map that Akbar Road and M.G. road form a right angle at their intersection point and Hudson lane form 57° angle with M.G. road.



1+2+1

- a) What is the measure of acute angle between Akbar Road and Hudson lane?
- (b) If Rishi is standing on M.G Road in the west direction and Shima is on H.M road, what is the shortest angle they can cover in order to meet?
- (c) Find the measure of reflex angle formed between M.G Road [in east direction] with Hudson lane.