

**CBSE SAMPLE PAPER****Lines Angles class IX****Section A MCQ . 1 Mark Each**

Q.1 An angle is  $16^\circ$  more than its complement. Then its measure is

(a)  $42^\circ$  (b)  $48^\circ$  (c)  $53^\circ$  (d)  $68^\circ$

Q.2 The angles of a triangle are in the ratio 5 : 3 : 7. The triangle is

(a) An acute angled triangle (b) An obtuse angled triangle

(c) A right triangle (d) An isosceles triangle.

Q.3 the necessary conditions for the lines l and m to be parallel, when these lines are intersected by a transversal line .n. is that

(a) Interior angles on the same side are equal. (b) Corresponding angles are equal

(c) Vertically opposite angles are equal. (d) Corresponding angles are not equal.

Q.4 One angle forming a linear pair is twice the other. The larger is

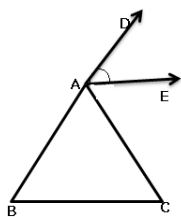
(a)  $120^\circ$  (b)  $60^\circ$  (c)  $160^\circ$  (d) None of these

Q.5 co interior angles are also called \_\_\_\_ angles

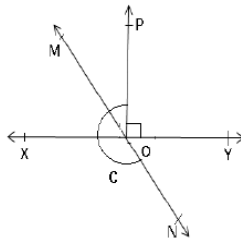
(a) allied (b) alternate (c) complementary (d) None of these

**Section B 2 Mark Each**

Q.6 In figure , AE bisects  $\angle BAD$  and  $\angle B = \angle C$  . Prove that  $AF \parallel BC$  .

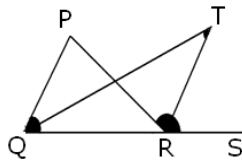


Q.7 In the figure lines XY and MN intersect at O, If  $\angle POY = 90^\circ$  and  $a : b = 2 : 3$ , find c.



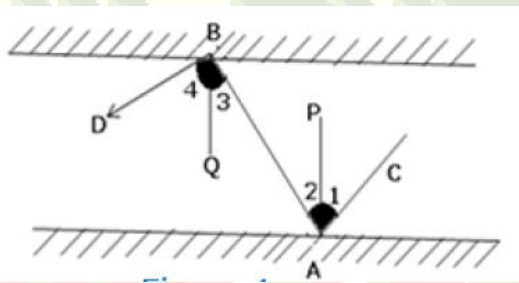
**Section C 3 Mark Each**

Q.8 In the figure the side QR of triangle PQR is produced to a point S. If the bisectors of  $\angle PQR$  and  $\angle PRS$  meet at point T, then prove that  $\angle QTR = \frac{1}{2} \angle QPR$ .



**Section D 4 Mark Each**

Q.9 In the figure, m and n are two plane mirrors parallel to each other. Show that the incident ray CA is parallel to the reflected ray BD.



Q.10 In figure BD bisects  $\angle EBC$ , CD bisects  $\angle FCB$ . Prove  $\angle BDC = 90 - \frac{1}{2} \angle A$

