

Maths Revision Test  
Time : 1 hr  
Max Marks : 30

Q1. Verify whether the indicated numbers are zeroes of their corresponding polynomials.

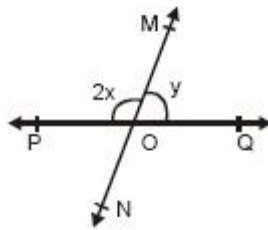
(a)  $Q(s) = -4s^3 + 7s^2 - 24$ ;  $s = -4$  and  $1$  1 marks

(b)  $P(t) = 8t^2 + 4t - 4$ ;  $t = \frac{1}{2}$  and  $-1$  1 marks

Q2. Using the long division method, determine the remainder when the polynomial  $4x^6 + 2x^4 - x^3 + 4x^2 - 7$  is divided by  $(x - 1)$ . 3 marks

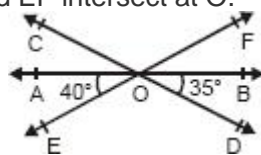
Q3. If  $t + \frac{1}{t} = 8$ , then find the value of  $t^3 + \frac{1}{t^3}$ . 4marks

Q4 In the given figure,  $\overline{PQ}$  and  $\overline{MN}$  intersect at O.  
(a) Determine y, when  $x = 60^\circ$ .



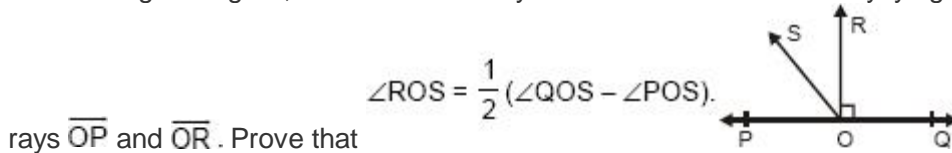
(b) Determine x, when  $y = 40^\circ$ . 3 marks

Q5 In the given figure, lines Ab, CD and EF intersect at O.



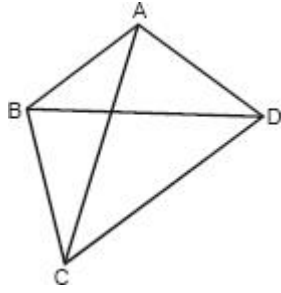
Find the measure of  $\angle AOC$ ,  $\angle COF$ . 3 marks

Q6. In the given figure, POQ is a line. Ray  $\overline{OR} \perp PQ$ ,  $\overline{OS}$  is another ray lying between



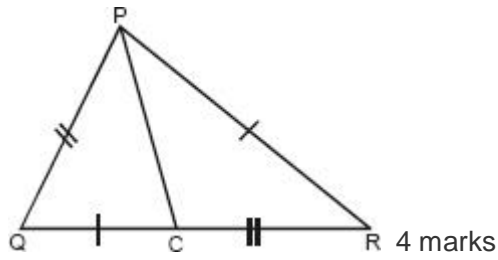
3 marks

Q7. ABCD is a quadrilateral in which  $AD = BC$  and  $\angle DAB = \angle CBA$ . Prove that  $\triangle ABD \cong \triangle BAC$ .



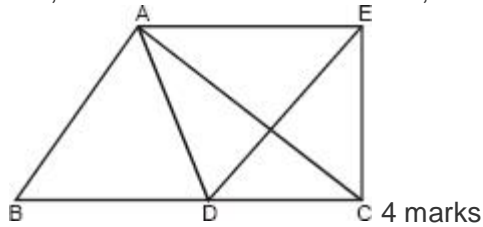
4 marks

**Q8.** In the given figure, triangles PQC and PRC are such that  $QC = PR$  and  $PQ = CR$ . Prove that  $\angle PCQ = \angle CPR$ .



4 marks

**Q9.** In the given figure,  $AB = AD$ ,  $AC = AE$  and  $\angle BAD = \angle EAC$ , then prove that  $BC = DE$ .



4 marks