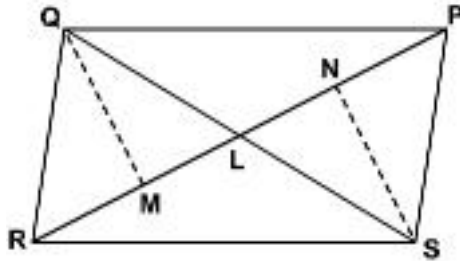
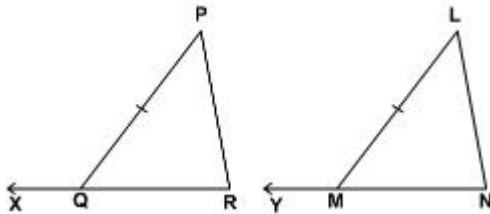


CLASS- IX JSUNIL TUTORIAL MATH AND SCIENCE
 TRIANGLE TEST PAPER-5

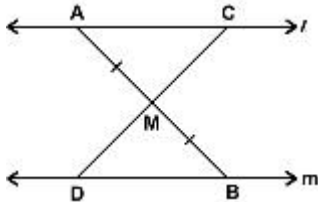
- Q1.** In the figure, QM and SN are both perpendicular to the segment RP and QM = SN. Prove that RP bisects QS.



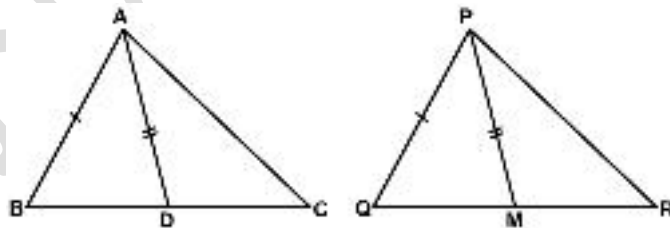
- Q2.** In Triangle PQR and Triangle LMN, PQ= LM , QR=MN and RQ and NM are extended to X and Y respectively and $\angle PQX = \angle LMY$. Prove that $\triangle PQR \cong \triangle LMN$.



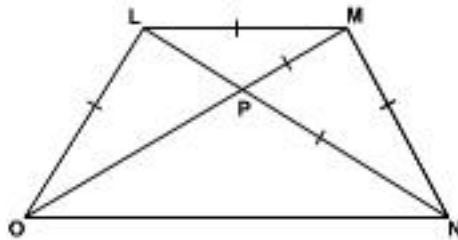
- Q3.** In the given figure, $l \parallel m$ and M is the mid-point of AB. Prove that M is also the mid-point of any line segment CD having its end points at l and m respectively.



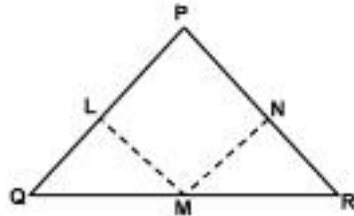
- Q4.** In $\triangle ABC$, sides AB and BC and the median AD are respectively equal to sides PQ and QR and the median PM of the triangle PQM. Prove that $\triangle ABD \cong \triangle PQM$.



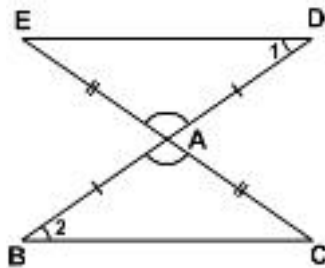
- Q5.** In the given figure, LO = MN and OM=LN. Prove that $\angle LOM = \angle MNL$ and $\angle OLM = \angle NML$.



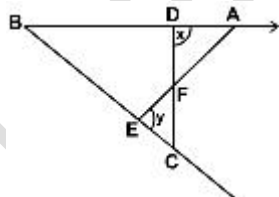
Q6. Given that $LM = MN$, $QM = MR$, $ML \perp PQ$ and $MN \perp PR$. Prove that $PQ = PR$.



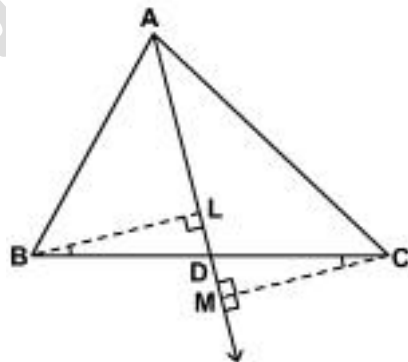
Q7. In the given figure, the sides BA and CA have been produced such that $BA = AD$ and $CA = AE$. Prove that $DE \parallel BC$.



Q8. In the given figure, if $x = y$ and $AB = CB$, then prove that $AE = CD$.

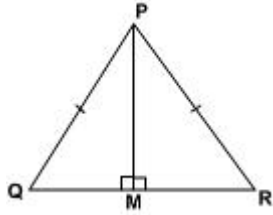


Q9. In the given figure, AD is the median of triangle ABC. If BL and CM are perpendiculars on AD and AD is produced, prove that $BL = CM$.

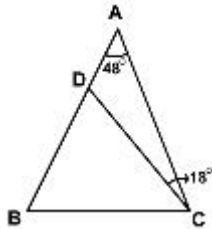


CLASS- IX JSUNIL TUTORIAL MATH AND SCIENCE
 TRIANGLE TEST PAPER-5

Q10. If triangle PQR is an isosceles triangle such that $PQ = PR$ and PM is an altitude from P on QR. Prove that $\angle Q = \angle R$, PM bisects QR and PM bisects $\angle P$.



Q11. In the figure, $AB = AC$, $\angle A = 48^\circ$; and $\angle ACD = 18^\circ$. Show that $BC = CD$.



Q12. In the given figure, prove that $\angle ADC = \alpha + \beta + \gamma$.

