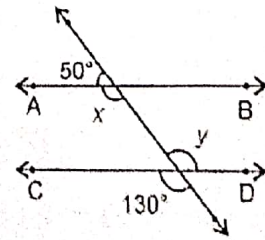
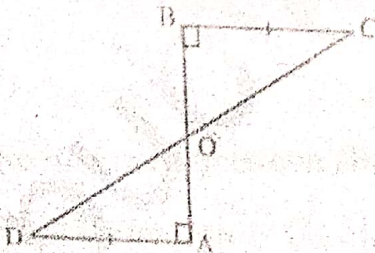


**KENDRIYA VIDYALAYA MAHABUBABAD**  
**HOLIDAYS HOMEWORK (AUTUMN BREAK 2020)**  
**CLASS IX**

SUBJECT	HOME WORK
ENGLISH	1. Write the summary of the poem No Men Are Foreign and A Legend of the Northland. 2. What did you learn from the chapter My Childhood? Write in 10 sentences.
SCIENCE	1. What is the bio-geo chemical cycle. Discuss any one bio-geo chemical cycle in detail (carbon or nitrogen). 2. Write a detailed note on 'blood- a connective tissue'
HINDI	1 उपसर्ग और प्रत्यय के 10-10 उदाहरण लिखिए 2 अर्थ के आधार पर 10 वाक्य तथा उनके नाम लिखिए 3 दशहरा पर्व पर एक रिपोर्ट तैयार कीजिये
SANSKRIT	<ul style="list-style-type: none"><li>• दो संस्कृत कवियों का जीवन परिचय लिखिए ।</li><li>• संस्कृत भाषायाम उदाहरणसहितं स्वर सन्धि लिखत।</li><li>• अवयव प्रयोग कृत्वा वाक्यनिर्माणं करोतु।</li><li>• कोविड 19 के समय मे बथुकम्मा/ दशहरा उत्सव पर सूचना तैयार करिये।</li></ul>

sub: Mathematics

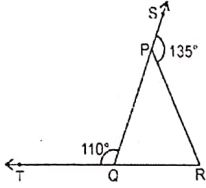
1. The angles of a quadrilateral are in ratio 3:5:9:13. Find all the angles of quadrilateral.



2. AD and BC are equal perpendiculars to a line segment AB. Show that CD bisects AB in fig(i)

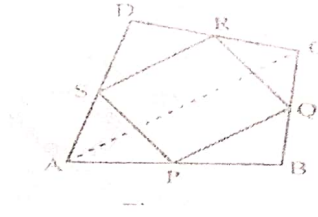
(i)

3. In figure (ii) if  $AB \parallel CD$  find the value of  $x$  and  $y$ .
4. If  $ABCD$  is a rectangle and diagonal  $AC$  bisects angle  $A$  as well as angle  $C$ . Show that  $ABCD$  is a square.
5. If side  $QP$  and  $RQ$  of  $\triangle PQR$  are produced to points  $S$  and  $T$ . If angle  $SPR = 135^\circ$  and angle  $PQT = 110^\circ$  then find angle  $PRQ$  in figure (iii)



(iii)

(ii)



(iv)

6. In the figure (iv) given above,  $ABCD$  is a quadrilateral.  $P, Q, R$  and  $S$  are the mid points of  $AB, BC, CD$  and  $DA$ .  $AC$  is a diagonal. Show that:
  - a)  $SR \parallel AC$  and  $SR = \frac{1}{2} AC$
  - b)  $PQ = SR$
  - c)  $PQRS$  is a parallelogram
7.  $ABC$  is an isosceles triangle in which  $AB = AC$ . Draw  $AP$  perpendicular to  $BC$  to show that Angle  $B =$  Angle  $C$ .
8. Prove that the line segment joining the mid point of two sides of a triangle is parallel to the third side and half of it.
9. In the figure given below side  $QR$  of  $\triangle PQR$  is produced to a point  $S$ . If the bisector of angle  $PQR$  and angle  $PRS$  meet at point  $T$ . Prove that angle  $QTR = \frac{1}{2}$  angle  $QPR$

