

VIII - Mathematics Assignment No. 5 - Understanding Quadrilateral

- Q1. In the rectangle ABCD, the diagonals intersect at X and  $\angle AXB = 124^\circ$ .  
Find the  $\angle ACD$  and  $\angle ADB$ .
- Q2. In the rectangle ABCD,  $\angle BAC = 23^\circ$ .  
Find  $\angle ADB$  and the obtuse angle between the diagonals.
- Q3. In the rectangle ABCD,  $\angle CBD = 63^\circ$ .  
Find  $\angle BAC$  and acute angle between the diagonals.
- Q4. In the rhombus ABCD,  $\angle ABC = 118^\circ$ .  
Find  $\angle ADC$ .
- Q5. In the rhombus ABCD,  $\angle BDC = 27^\circ$ .  
Find  $\angle BCD$ .
- Q6. In the rhombus ABCD,  $\angle ABD = 35^\circ$ .  
Find the exterior angle at C.

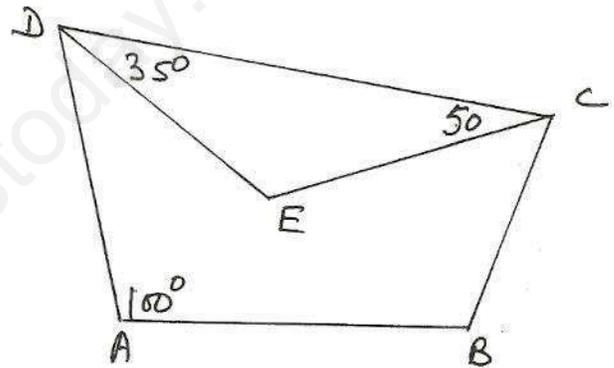
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Q7. ABCD and ABPQ are parallelograms on opposite sides of AB. If  $\angle D = 65^\circ$ ,  $\angle Q = 48^\circ$   
Find  $\angle CBP$ .

Q8. In the parallelogram ABCD,  $\angle ABD = 43^\circ$   
and  $\angle ADB = 70^\circ$ . Find the exterior angle at B.

Q9. Find the angles of a parallelogram in which one angle is double the other.

Q10. In the adjoining figure, DE, CE are the bisectors of  $\angle D$  and  $\angle C$  respectively.  
Find  $\angle B$ .



ANSWERS:-

(Q1) $28^\circ, 62^\circ$	(Q5) $126^\circ$	(Q9) $60^\circ, 120^\circ$
(Q2) $67^\circ, 134^\circ$	(Q6) $70^\circ$	$60^\circ, 120^\circ$
(Q3) $27^\circ, 54^\circ$	(Q7) $113^\circ$	(Q10) $90^\circ$
(Q4) $31^\circ$	(Q8) $67^\circ$	