



**Assignment**

**ABHYAS Academy,**

Near Govt. College, Nishat Cinema Road,  
Ambala Cantt., Haryana (India)

Phone: +91-171-2631595, +91-9416541198

e-Mail: anusethi1968@yahoo.com

[www.abhyasonline.in](http://www.abhyasonline.in)

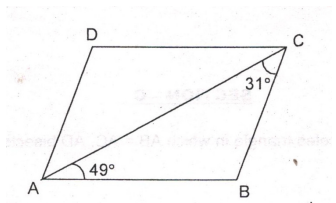
Date: \_\_\_ / \_\_\_ / \_\_\_

Name: \_\_\_\_\_

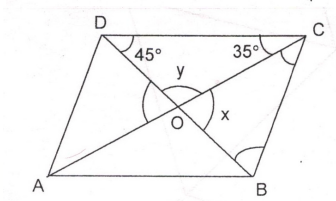
Max Marks: 20

**Section- A (One Marks Each)**

- The angles of a quadrilateral are in the ratio 3 : 5 : 9 : 13. Find all the angles of the quadrilateral.
- In the given figure, ABCD is a parallelogram and AC represents one of its diagonals. What are the measures of angle A and angle C?



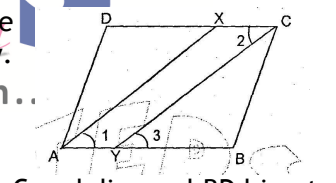
- In the given figure, ABCD is a parallelogram. What are the measures of x and y?



- The diagonals AC and BD of a quadrilateral ABCD bisect each other. If AB = 6 cm and BC = 4 cm, What is the perimeter of the quadrilateral?
- ABCD is a parallelogram in which BC = 3 cm and CD – DA = 2 cm. Find the lengths of CD and DA.
- ABCD is a parallelogram in which AB = 8 cm and AB: BC = 2: 1. Find the measure of DA.

**Section-B (Two Marks Each)**

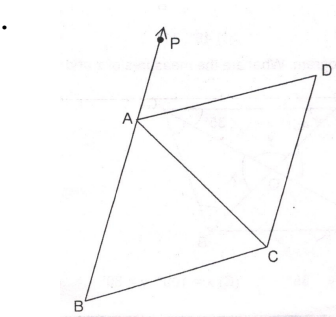
- In the given figure, ABCD is a parallelogram in which line segments AX and CY bisect the angles A and C respectively. Show that AX || CY.



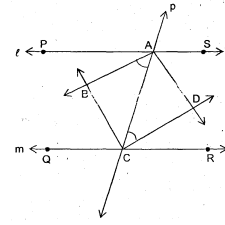
- ABCD is a rhombus. Show that diagonal AC bisects  $\angle A$  as well as  $\angle C$  and diagonal BD bisects  $\angle B$  as well as  $\angle D$

**Section-C (Three Marks Each)**

- In the given figure, ABC is an isosceles triangle in which AB = AC. AD bisects exterior angle PAC and CD || AB. Show that  
(i)  $\angle DAC = \angle BCA$   
(ii) ABCD is a parallelogram



- 10 Two parallel lines  $l$  and  $m$  are intersected by a transversal line  $p$ . Show that the quadrilateral formed by the bisectors of interior angles is a rectangle.



**Section-D (Four Marks Each)**

- 11 Show that the bisectors of angles of a parallelogram form a rectangle

