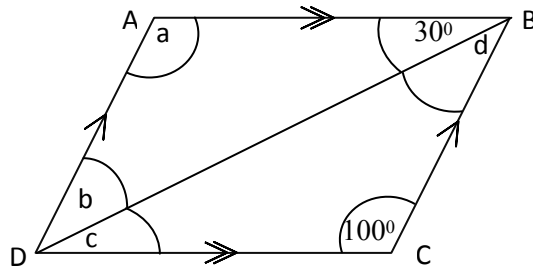




## Second Term Revision Exercise 2

### Parallelograms

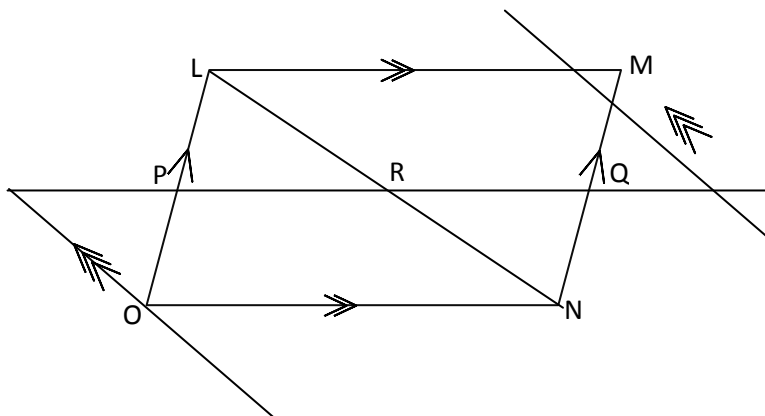
1. Find the values of the angles  $a, b, c$  and  $d$  in the following parallelogram.



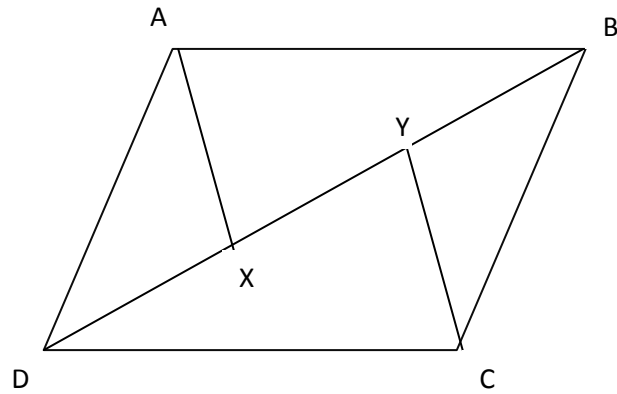
2. PQRS is a parallelogram. X, Y points are situated on the diagonal PR so that  $PX=XY=YR$ . Draw a diagram using the given information,

- I. Prove that  $QX=SY$
- II. Prove that  $QX \parallel SY$ .

3. According to the information given in the diagram prove that midpoint of the PQ is R.



4. In a parallelogram ABCD the points X,Y are marked on BD so that  $DX=BY$ . Using the features of a parallelogram and marking the given data in the diagram show that AXCY is a parallelogram.



5. In the parallelogram ABCD the line CA is extended to L so that  $CA=AL$ . The extended lines CD and LB meet at M. Prove that ALBD is a parallelogram. If ALBD is a rhombus write the relationship of the sides of the rhombus.

