TO DRAW A LINE PARALLEL TO A GIVEN LINE THROUGH A GIVEN POINT

Example 1 : Construct a line parallel to a given line AB passing through a point C outside it.

Solution : **Steps of Construction :**

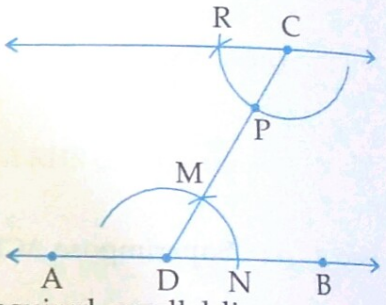
Step 1 : Draw a line AB and mark a point C outside it.

Step 2 : Take any point D on AB and join CD.

Step 3 : With D as centre, draw an arc cutting AB and DC at N and M respectively.

Step 4 : With C as centre and same radius as in above step, draw an arc on the opposite side of DC to cut DC at P.

Step 5 : With P as centre and radius equal to MN, draw an arc cutting the arc drawn in step 4 at R.



Step 6 : Join CR and extend it to both directions to get the required parallel line.

Line CR is the required line parallel to AB.

TO DRAW A LINE PARALLEL TO A GIVEN LINE AT A GIVEN DISTANCE FROM IT

Example 1 : Draw a line parallel to given line XY at a distance of 5 cm from it.

Solution : **Steps of Construction :**

Step 1 : Draw a line XY and take a point A on it.

Step 2 : At point A construct an angle of 90° and cut this perpendicular line at a distance 5 cm from A such that AP = 5 cm.

Step 3 : To draw a line parallel to XY and passing through P, construct $\angle APQ = 90°$. Extend this line on both sides.

Line QP is the required line parallel to line XY at a distance of 5 cm from it.