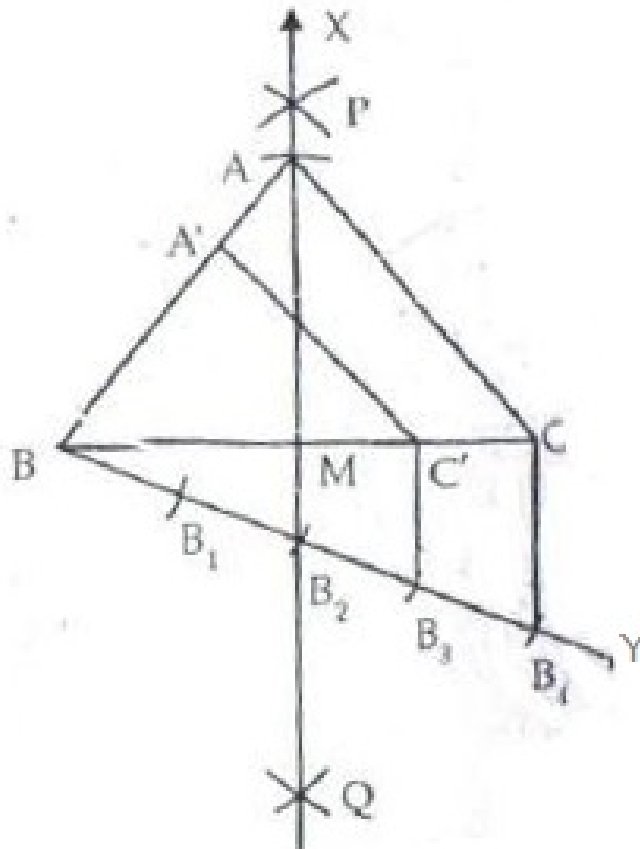




Exercise 13A

Question 11:



Steps of Construction:

Step 1: Draw a line segment $BC = 9\text{ cm}$

Step 2: with centre B and radius more than $\frac{1}{2} BC$, draw arcs on both sides of BC.

Step 3: With centre C and same radius draw other arcs on both sides of BC intersecting previous arcs at P and Q.

Step 4: join PQ and produce it to a point X. PQ meets BC at M.

Step 5: With centre M and radius 5 cm, draw an arc intersecting MX at A.

Step 6: Join AB and AC.

$\triangle ABC$ is the required triangle.

Step 7: Draw a line BY below BC.

Step 8: Cut off 4 equal distances from BY so that

$$BB_1 = B_1B_2 = B_2B_3 = B_3B_4$$

Step 9: Join CB_4

Step 10: Draw $C'B_3$ parallel to CB_4

Step 11: Draw $C'A'$ parallel to CA, through C' intersecting BA at A' .

$\triangle A'BC'$ is the required similar triangle.

***** END *****

