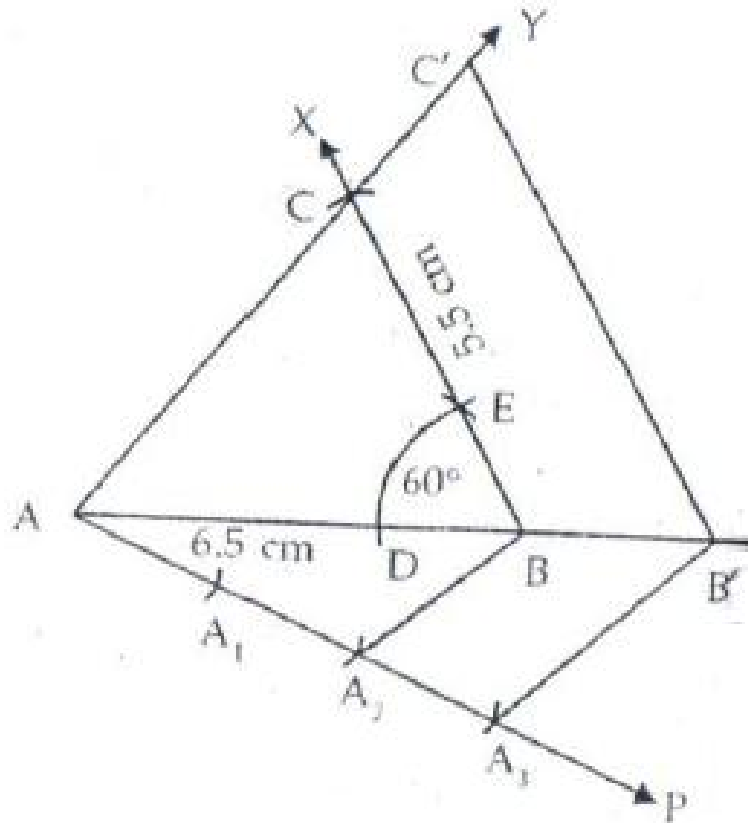




### Exercise 13A

Question 9:



Steps of construction:

Step 1: Draw a line segment  $AB = 6.5$  cm

Step 2: With B as centre and some radius draw an arc cutting AB at D.

Step 3: With centre D and same radius draw another arc cutting previous arc at E.  $\angle ABE = 60^\circ$

Step 4: Join BE and produce it to a point X.

Step 5: With centre B and radius 5.5 cm draw an arc intersecting BX at C.

Step 6: Join AC.

$\triangle ABC$  is the required triangle.

Step 7: Draw a line AP below AB.

Step 8: Cut-off 3 equal distances such that

$$AA_1 = A_1A_2 = A_2A_3$$

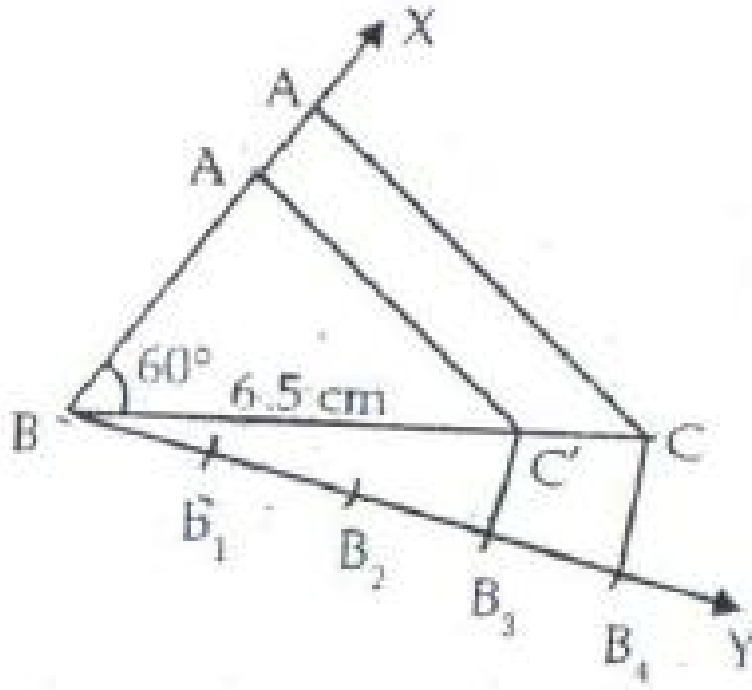
Step 9: Join  $BA_2$

Step 10: Draw  $A_3B'$  through  $A_3$  parallel to  $A_2B$ .

Step 11: Draw a line parallel to BC through  $B'$  intersecting AY at  $C'$ .

$\triangle AB'C'$  is the required triangle.

Question 10:



Steps of construction:

Step 1: Draw a line segment  $BC = 6.5 \text{ cm}$

Step 2: Draw an angle of  $60^\circ$  at B so that  $\angle XBC = 60^\circ$ .

Step 3: With centre B and radius  $4.5 \text{ cm}$ , draw an arc intersecting XB at A.

Step 4: Join AC.

$\triangle ABC$  is the required triangle.

Step 5: Draw a line BY below BC.

Step 6: Cut- off 4 equal distances from BY.

Such that  $BB_1 = B_1B_2 = B_2B_3 = B_3B_4$

Step 7: Join  $CB_4$

Step 8: draw  $B_3C'$  parallel to  $CB_4$

Step 9: Draw  $C'A'$  parallel to CA through C' intersecting BA produced at A'.

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

\*\*\*\*\* END \*\*\*\*\*