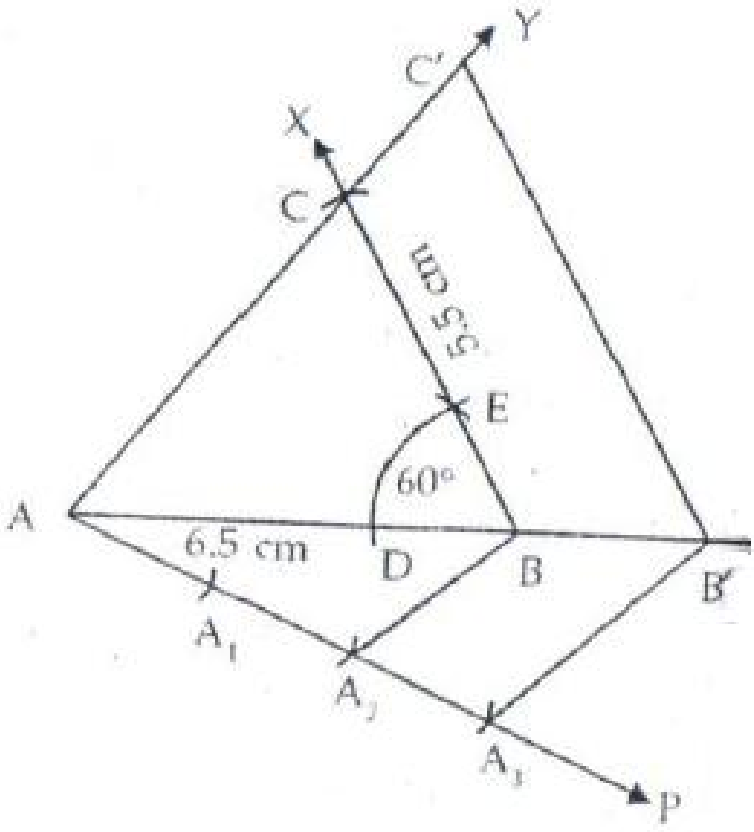
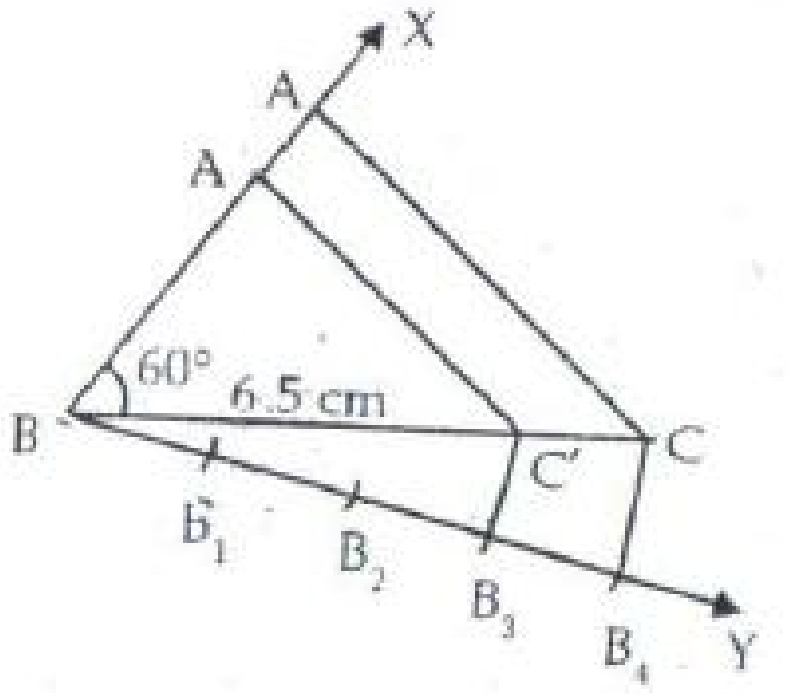
Exercise 13A

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. ∠ ABE = 60°
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.
Δ 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_3B.
Step 11: Draw a line parallel to BC through B′ intersecting AY at C′.
Δ AB′C′ is the required triangle.

Question 10:



Steps of construction:
Step 1: Draw a line segment BC = 6.5 cm
Step 2: Draw an angle of 60° at B so that ∠ XBC = 60°.
Step 3: With centre B and radius 4.5cm, draw an arc intersecting XB at A.
Step 4: Join AC.
Δ 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'.
Δ A'BC' is the required similar triangle.

********** END **********