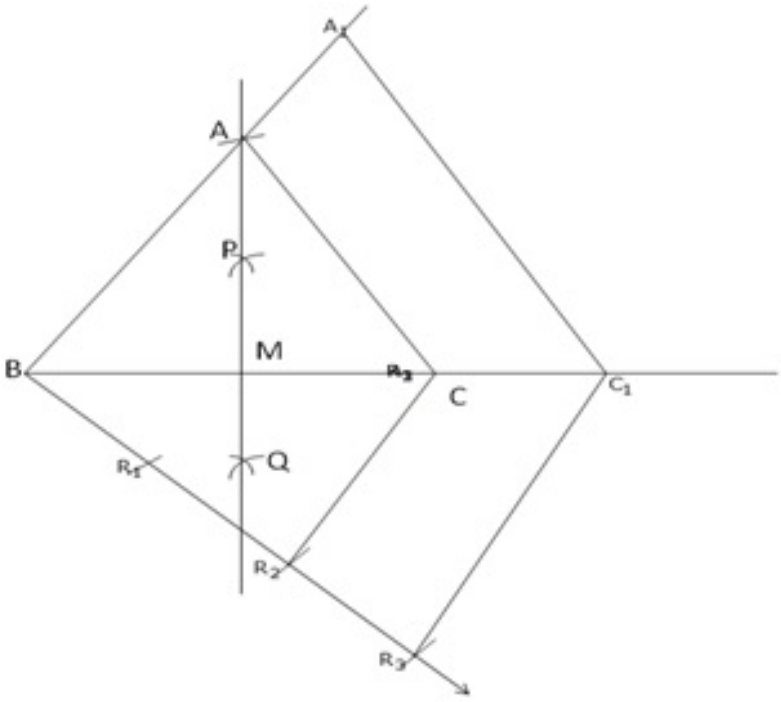
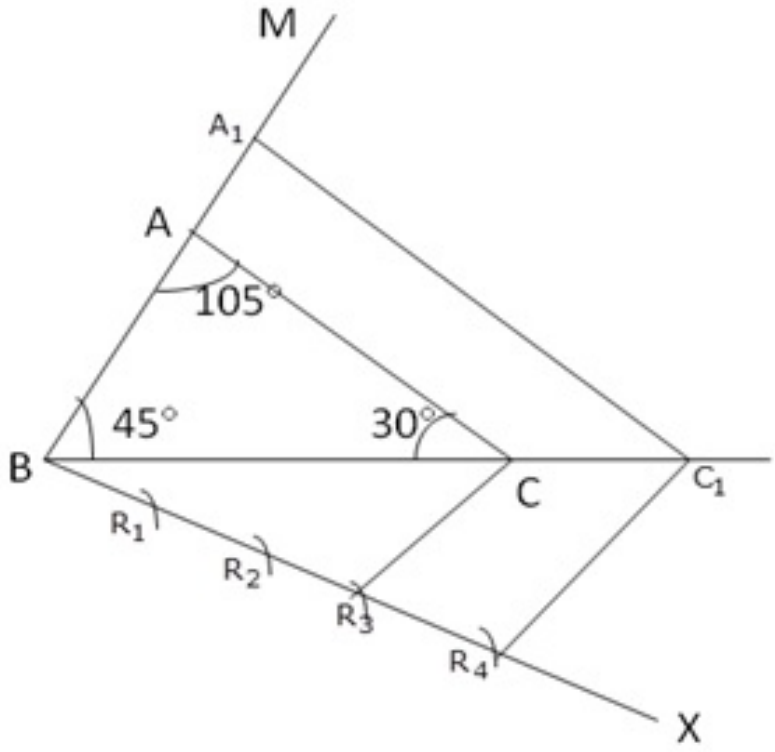
Exercise 13A

Question 5:



Steps of construction:
Step 1: Draw a line segment BC = 6 cm
Step 2: Draw a right bisector PQ of BC meeting it at M.
Step 3: From QP cut - off a distance MA = 4 cm
Step 4: Join AB, AC.
Δ ABC is the given triangle.
Step 5: Below BC, draw a line BX.
Step 6: Along BX, cut - off 3 equal distances such that
$BR_1 = R_1R_2 = R_2R_3$
Step 7: Join R_2C.
Step 8: Through R_3 draw a line $R_3C_1 \parallel R_2C$.
Step 9 : Through C_1 draw line $C_1A_1 \parallel CA$.
Δ A_1BC_1 is the required triangle.

Question 6:



Steps of Construction:
Step 1: Draw a line segment BC = 5.4 cm
Step 2. At B, draw ∠ CBM = 45°
Step 3: Now ∠ A = 105°, ∠ B = 45°, ∠ C = 180° - (105°+ 45°) = 30°
At C draw ∠ BCA = 30°.
Δ ABC is the given triangle.
Step 4: Draw a line BX below BC.
Step 5: Cut-off equal distances such that $BR_1 = R_1R_2 = R_2R_3 = R_3R_4$
Step 6: Join R_3C.
Step 7: Through R_4, draw a line $R_4C_1 \parallel R_3C$.
Step 8: Through C_1 draw a line C_1A_1 parallel to CA.
Δ A_1BC_1 is the required triangle.

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