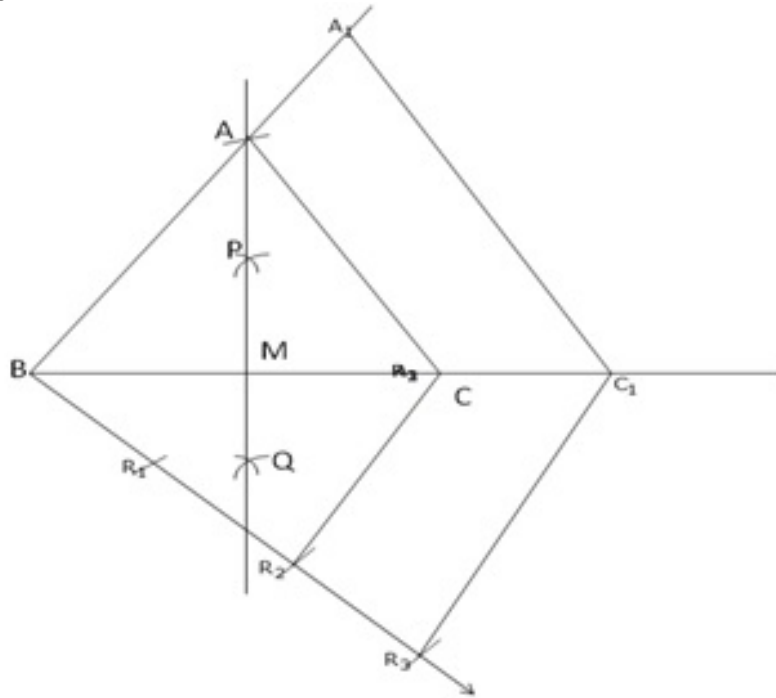




Exercise 13A

Question 5:



Steps of construction:

Step 1: Draw a line segment $BC = 6\text{ cm}$

Step 2: Draw a right bisector PQ of BC meeting it at M .

Step 3: From QP cut - off a distance $MA = 4\text{ cm}$

Step 4: Join AB, AC .

ΔABC is the given triangle.

Step 5: Below BC , draw a line BX .

Step 6: Along BX , cut - off 3 equal distances such that

$BR_1 = R_1R_2 = R_2R_3$

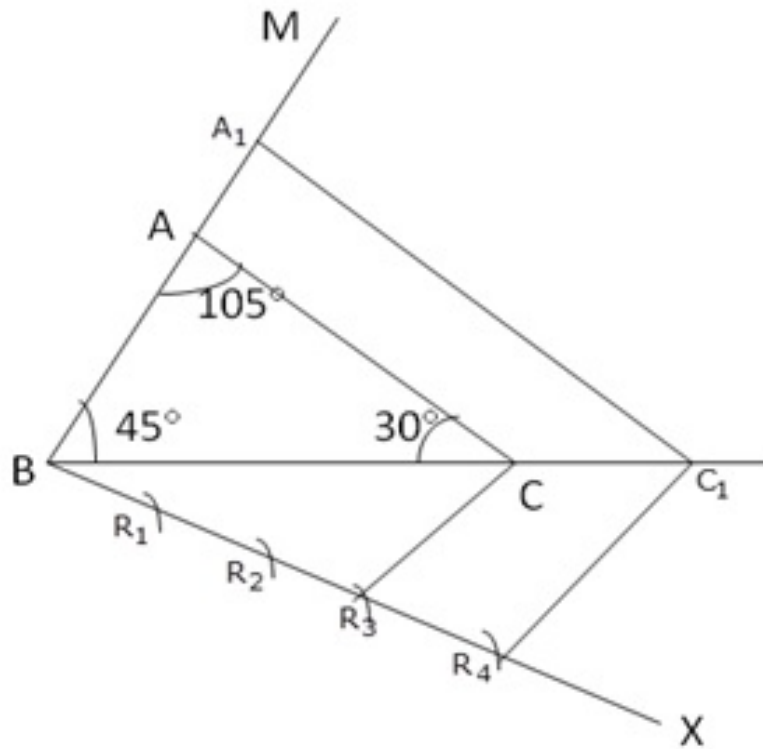
Step 7: Join R_2C .

Step 8: Through R_3 draw a line $R_3C_1 \parallel R_2C$.

Step 9 : Through C_1 draw line $C_1A_1 \parallel CA$.

ΔA_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 $\angle CBM = 45^\circ$

Step 3: Now $\angle A = 105^\circ$, $\angle B = 45^\circ$, $\angle C = 180^\circ - (105^\circ + 45^\circ) = 30^\circ$

At C draw $\angle BCA = 30^\circ$.

ΔABC 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 .

ΔA_1BC_1 is the required triangle.

***** END *****