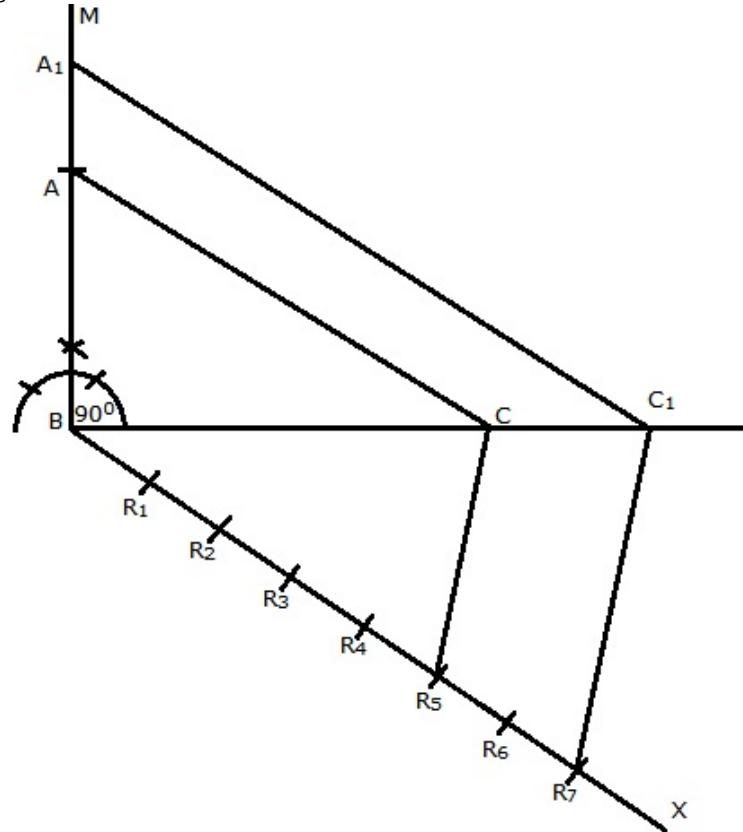Exercise 13A

Question 7:

Steps of Construction:
Step 1: Draw a line segment BC = 4 cm
Step 2: Draw a right- angle CBM at B.
Step 3: Cut-off BA = 3cm from BM.
Step 4: Join AC.
Δ ABC is the given triangle.
Step 5: Below BC draw a line BX.
Step 6: Along BX, cut-off 7 equal distances such that
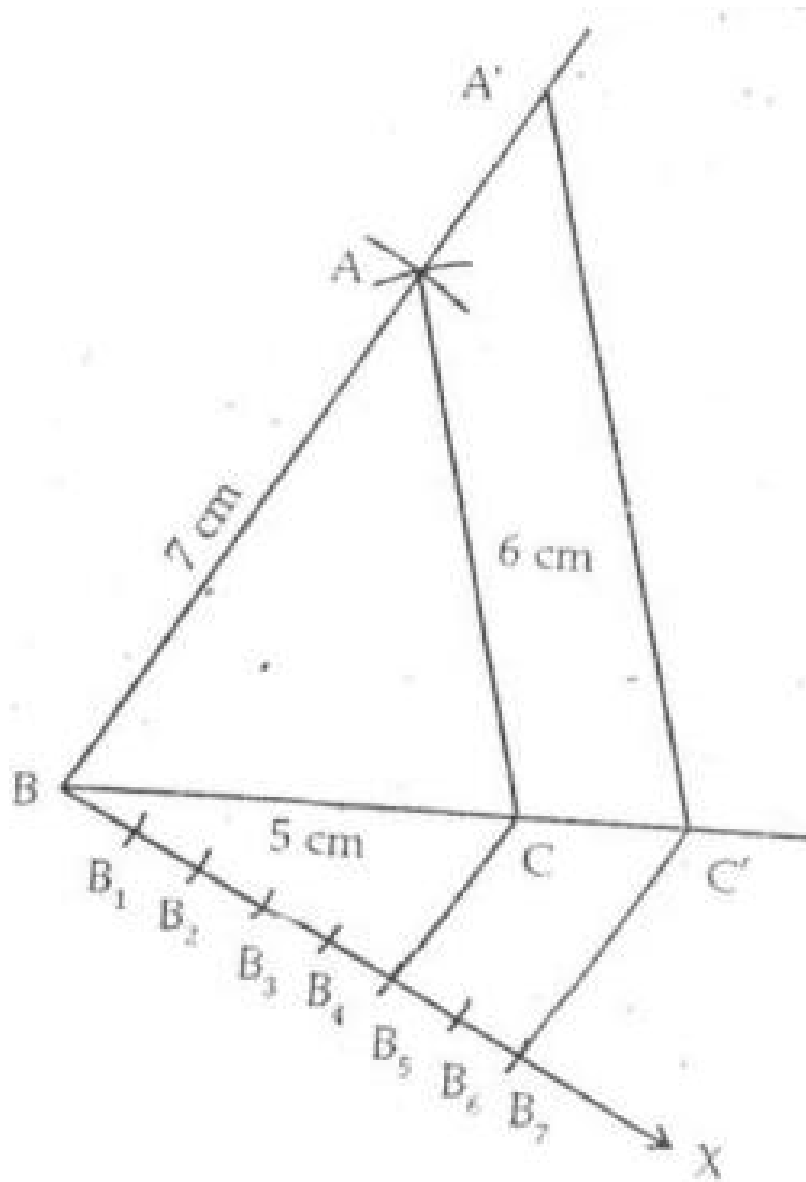$BR_1 = R_1R_2 = R_2R_3 = R_3R_4 = R_4R_5 = R_5R_6 = R_6R_7$
Step 7: Join R_5C.
Step 8: Through R_7 draw a line parallel to R_5C cutting BC produced at C_1
Step 9: Through C_1 draw a line parallel to CA cutting BA at A_1
Δ A_1BC_1 is the required triangle.

Question 8:

A'

A

7 cm

6 cm

B

5 cm

C

C'

B₁ B₂

B₃ B₄

B₅ B₆ B₇

X

Steps of Construction:
Step 1: draw a line segment BC = 5 cm
Step 2: With B as centre and radius 7cm an arc is drawn.
Step 3: With C as centre and radius 6 cm another arc is drawn intersecting the previous arc at A.
Step 4: Join AB and AC.
Step 5: Δ ABC is the given triangle.
Step 6: Draw a line BX below BC.
Step 7: Cut- off equal distances from DX such that
$BB_1 = B_1B_2 = B_2B_3 = B_3B_4 = B_4B_5 = B_5B_6 = B_6B_7$
Step 8: join B_5C.
Step 9: Draw a line through B_7 parallel to B_5C cutting BC produced at C'.
Step 10: Through C' draw a line parallel to CA, cutting BA produced at A'.
Step 11: Δ A'BC' is the required triangle.

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