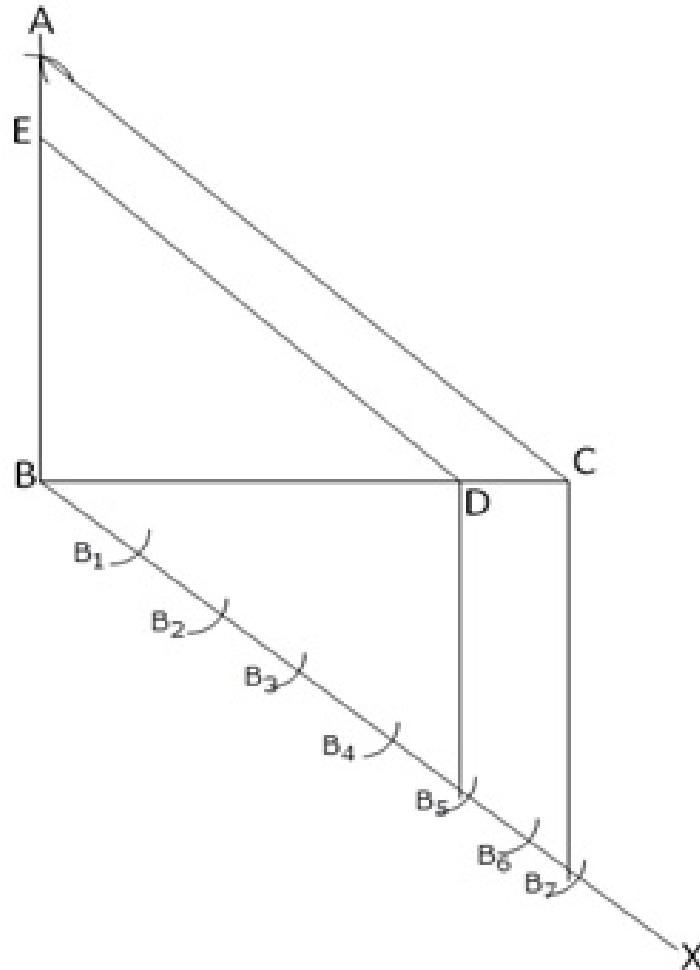




### Exercise 13A

Question 3:



Steps of construction:

Step 1: Draw a line segment  $BC = 6$  cm

Step 2: With B as centre and radius equal to 5 cm draw an arc.

Step 3: With C as centre and radius equal to 7 cm draw another arc cutting the previous arc at A.

Step 4: Join AB and AC. Thus,  $\triangle ABC$  is obtained.

Step 5: Below BC draw another line BX.

Step 6: Mark 7 points  $B_1B_2B_3B_4B_5B_6B_7$  such that

$BB_1 = B_1B_2 = B_2B_3 = B_3B_4 = B_4B_5 = B_5B_6 = B_6B_7$

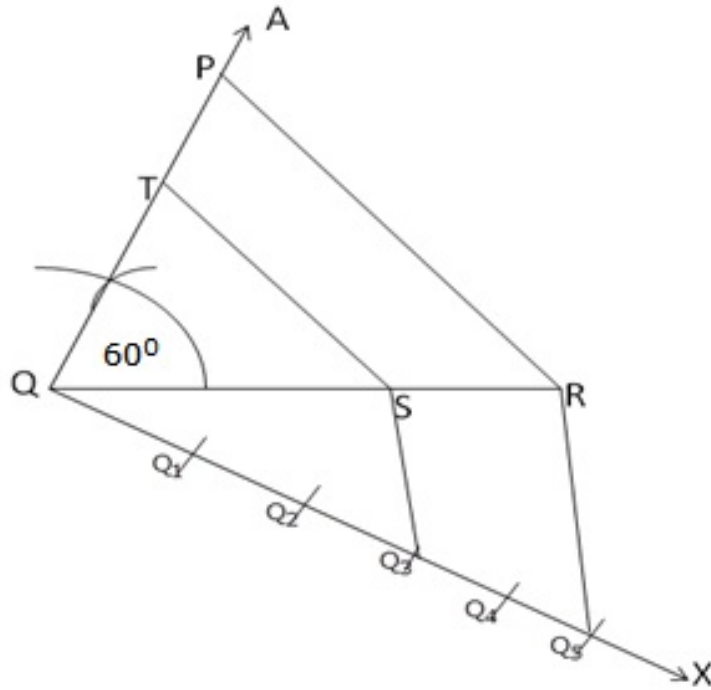
Step 7: Join  $B_7C$ .

Step 8: from  $B_5$ , draw  $B_5D \parallel B_7C$ .

Step 9: Draw a line DE through D parallel to CA.

Hence  $\triangle BDE$  is the required triangle.

Question 4:



Steps of construction:

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

Step 2: At  $Q$ , draw an angle  $RQA$  of  $60^\circ$ .

Step 3: From  $QA$  cut off a segment  $QP = 5 \text{ cm}$ .

Join  $PR$ .  $\triangle PQR$  is the given triangle.

Step 4: Below  $QR$  draw another line  $QX$ .

Step 5: Along  $QX$  cut - off equal distances  $Q_1Q_2Q_3Q_4Q_5$

$QQ_1 = Q_1Q_2 = Q_2Q_3 = Q_3Q_4 = Q_4Q_5$

Step 6: Join  $Q_5R$ .

Step 7: Through  $Q_3$  draw  $Q_3S \parallel Q_5R$ .

Step 8: Through  $S$ , draw  $ST \parallel PR$ .

$\triangle TQS$  is the required triangle.

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