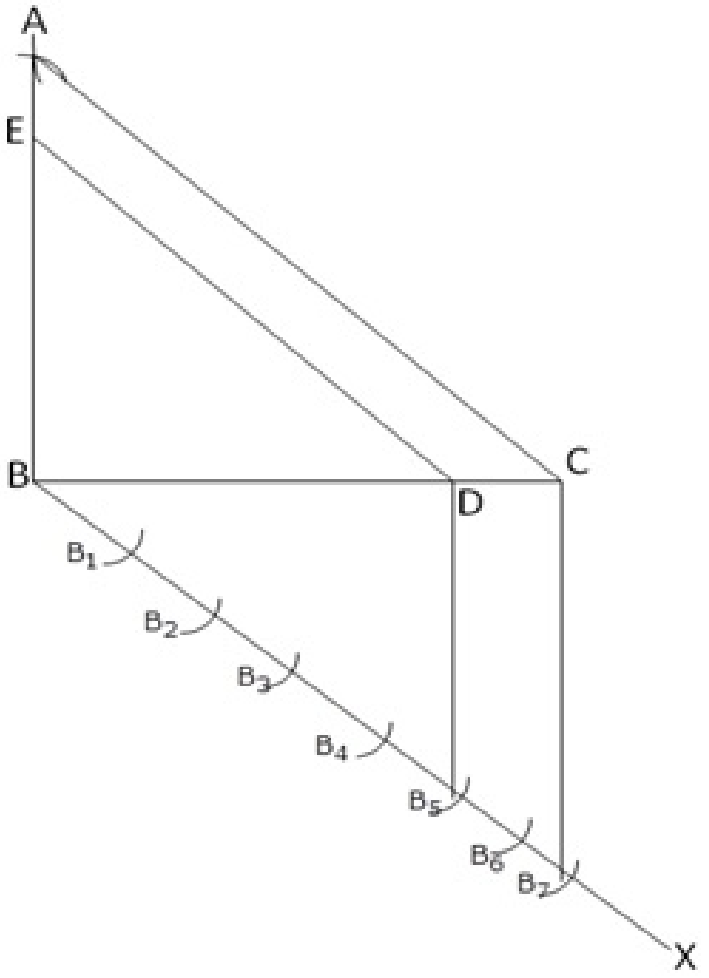
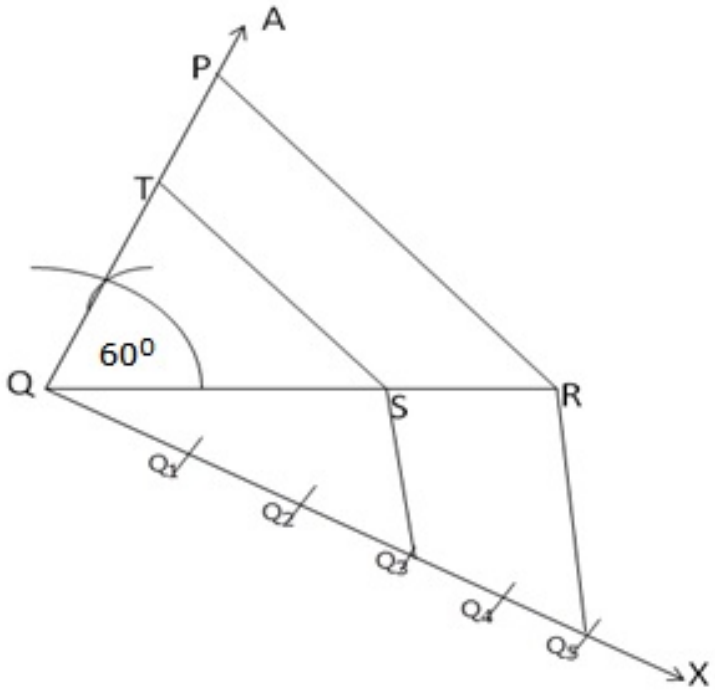
Exercise 13A

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, **Δ** 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 **Δ** BDE is the required triangle.

Question 4:



Steps of construction:
Step 1: Draw a line segment QR = 6 cm
Step 2: At Q, draw an angle RQA of 60°.
Step 3: From QA cut off a segment QP = 5 cm.
Join PR. **Δ** PQR is the given triangle.
Step 4: Below QR draw another line QX.
Step 5: Along QX cut - off equal distances $Q_1Q_2Q_3Q_4Q_5$
$QQ_1 = Q_1Q2 = Q_2Q_3 = Q3Q_4 = Q_4Q_5$
Step 6: Join Q_5R.
Step 7: Through Q_3 draw $Q_3S \parallel Q_5R$.
Step 8: Through S, draw ST || PR.
Δ TQS is the required triangle.

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