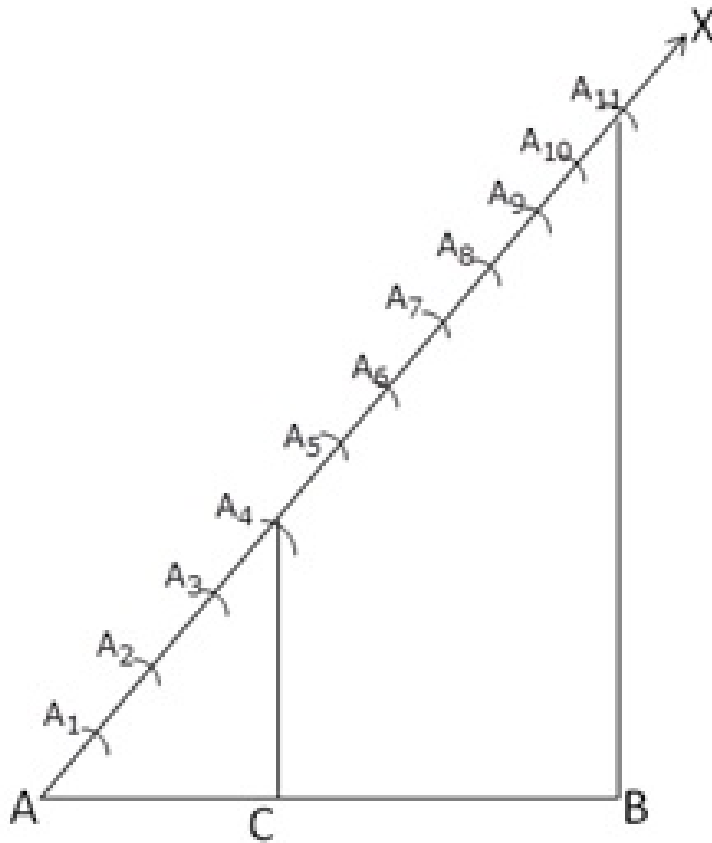




### Exercise 13A

Question 1:



Steps of construction:

Step 1 : Draw a line segment  $AB = 6.5$  cm

Step 2: Draw a ray  $AX$  making  $\angle BAX$ .

Step 3: Along  $AX$  mark  $(4+7) = 11$  points

$A_1, A_2, A_3, A_4, A_5, A_6, A_7, A_8, A_9, A_{10}, A_{11}$ , such that

$AA_1 = A_1A_2$

Step 4: Join  $A_{11}$  and  $B$ .

Step 5: Through  $A_4$  draw a line parallel to  $A_{11}B$  meeting  $AB$  at  $C$ .

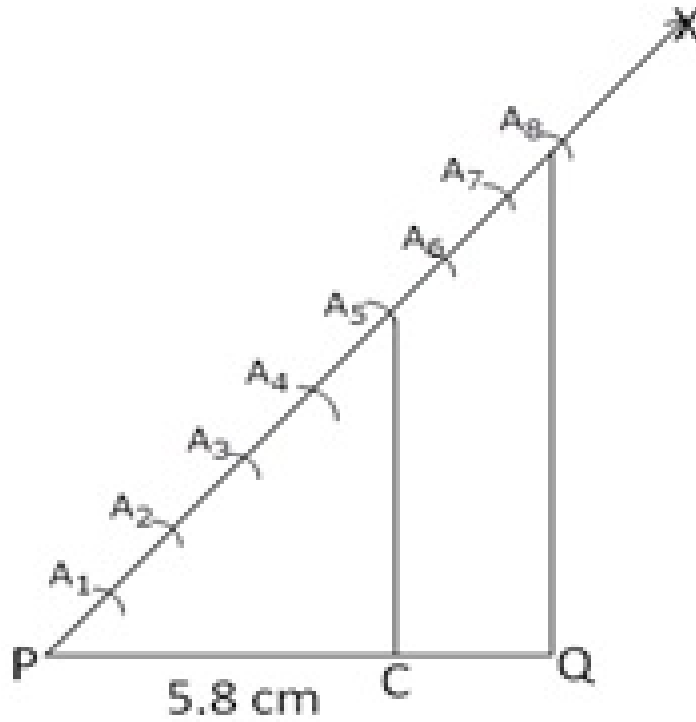
Therefore,  $C$  is the point on  $AB$ , which divides  $AB$  in the ratio  $4 : 7$

On measuring,

$AC = 2.4$  cm

$CB = 4.1$  cm

Question 2:



Steps of Construction:

Step 1 : Draw a line segment  $PQ = 5.8$  cm

Step 2: Draw a ray  $PX$  making an acute angle  $QPX$ .

Step 3: Along  $PX$  mark  $(5 + 3) = 8$  points

$A_1, A_2, A_3, A_4, A_5, A_6, A_7$  and  $A_8$  such that

$PA_1 = A_1A_2 = A_2A_3 = A_3A_4 = A_4A_5 = A_5A_6 = A_6A_7 = A_7A_8$

Step 4: Join  $A_8Q$ .

Step 5: From  $A_5$  draw  $A_5C \parallel A_8Q$  meeting  $PQ$  at  $C$ .

$C$  is the point on  $PQ$ , which divides  $PQ$  in the ratio  $5 : 3$

On measurement,

$PC = 3.6$  cm,  $CQ = 2.2$  cm

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