

Chapter-19
Geometrical Constructions

Exercise 19.1

Q.1 Construct a line segment whose lengths are

(i) 4.8 cm

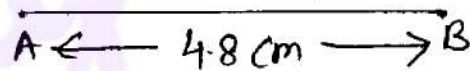
(ii) 12 cm 5 mm

(iii) 7.6 cm.

Solution: (i) 4.8 cm,

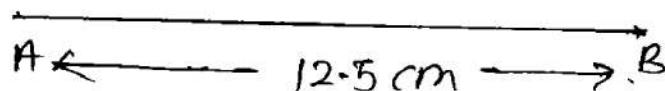
Step-1: Mark a point A on the plane of the paper and place the ruler so that zero mark of the ruler is at A.

Step-2: Mark a point B at a distance of 4.8 cm from A.



(ii) 12 cm 5 mm = 12.5 cm.

Now, mark a point B against a point A at a distance of 12.5 cm from A.



(iii) 7.6 cm: Mark a point B against a point A at a distance of 7.6 cm from A.

$\overline{A \leftarrow 7.6 \text{ cm} \rightarrow B}$

Q.2 Construct two segments of lengths 4.3 cm and 3.2 cm. Construct a segment whose length is equal to the sum of the lengths of these segments.

Solution: With the help of compass and ruler construct AB and CD of lengths 4.3 cm and 3.2 cm

$\overline{A \leftarrow 4.3 \text{ cm} \rightarrow B}$
 $\overline{C \leftarrow 3.2 \text{ cm} \rightarrow D}$

Now draw a line l , mark a point P on it and mark a point Q against P at a distance of $(4.3 + 3.2 = 7.5 \text{ cm})$ from P.

$\overline{P \leftarrow 7.5 \text{ cm} \rightarrow Q}$