

Board –CBSE

Class – 6th

Topic – Practical Geometry Ex:14.3

Exercise 14.3

1. Draw any line segment \overline{PQ} . Without measuring \overline{PQ} , construct a copy of \overline{PQ} .

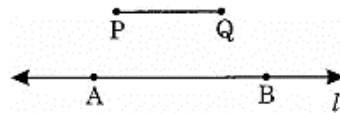
Ans. Step I: Draw \overline{PQ} of unknown length.

Step II: Draw a line l and mark a point A on it.

Step III: Open the compass equal to PQ .

Step IV: Place the needle of the compass at A and mark a point B on l .

Thus, \overline{AB} is a copy of \overline{PQ} .



2. Given some line segment \overline{AB} whose length you do not know, construct \overline{PQ} such that the length of \overline{PQ} is twice that of \overline{AB} .

Ans. Step I: Draw \overline{AB} of any suitable length.

Step II: Place the needle of the compass at A and the other pencil end at B .

Step III: Draw a line l and take a point P on it.

Step IV: With the same opening of the compass, place the needle at P and mark another point Q on l .

Thus \overline{PQ} is the required line segment whose length is twice the length of \overline{AB} i.e. $\overline{PQ} = 2\overline{AB}$.

