

NCERT SOLUTIONS FOR CLASS 6 MATHS PRACTICAL GEOMETRY EXERCISE 14.3

Exercise 14.3
Question 1:
Draw any line segment \overline{PQ} . Without measuring \overline{PQ} , construct a copy of \overline{PQ} .
Answer:
The following steps will be followed to draw the given line segment $\overline{^{PQ}}$ and to construct
a copy of \overline{PQ} .
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(1) Let PQ be the given line segment.
PO PO
(2) Adjust the compasses up to the length of PQ.
P
(3) Draw any line I and mark a point A on it.
7A F
(4) Put the pointer on point A, and without changing the setting of compasses, draw an arc to cut the line segment at point B.
A B
AB is the required line segment.
Question 2:
Given some line segment \overline{AB} , whose length you do not know, construct ${}^{\hbox{PQ}}$ such that
the length of $\overline{^{PQ}}$ is twice that of \overline{AB} .
Answer:
The following steps will be followed to construct a line segment \overline{PQ} such that the length
of PQ is twice that of AB.
(1) Let \overline{AB} be the given line segment.
A B
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(2) Adjust the compasses up to the length of AB.
(3) Draw any line / and mark a point P on it.
(3) Draw any line r and mark a point r on it.
(4) Put the pointer on P and without changing the setting of compasses, draw an arc to
cut the line segment at point X.

(5) Now, put the pointer on point \boldsymbol{X} and again draw an arc with the same radius as

before, to cut the line / at point Q.