



NCERT SOLUTIONS FOR CLASS 6 MATHS PRACTICAL GEOMETRY EXERCISE 14.4

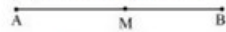
Exercise 14.4

Question 1:

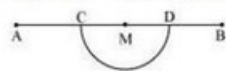
Draw any line segment \overline{AB} . Mark any point M on it. Through M, draw a perpendicular to \overline{AB} . (Use ruler and compasses)

Answer:

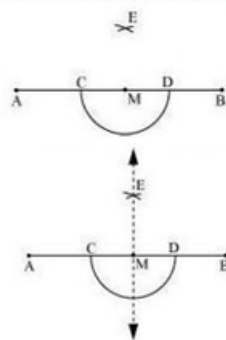
- (1) Draw the given line segment \overline{AB} and mark any point M on it.



- (2) With M as centre and a convenient radius, construct an arc intersecting the line segment \overline{AB} at two points C and D.



- (3) With C and D as centres and a radius greater than CM, construct two arcs. Let these be intersecting each other at E.

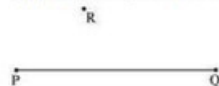


Question 2:

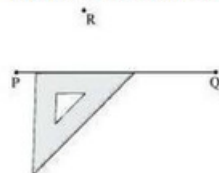
Draw any line segment \overline{PQ} . Take any point R not on it. Through R, draw a perpendicular to \overline{PQ} . (Use ruler and set-square)

Answer:

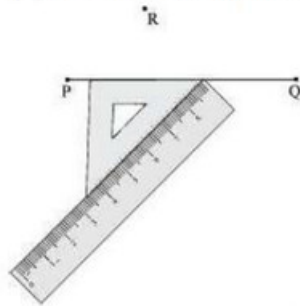
- (1) Take the given line segment \overline{PQ} and mark any point R outside \overline{PQ} .



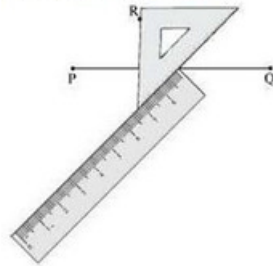
- (2) Place a set square on \overline{PQ} such that one arm of its right angle aligns along \overline{PQ} .



(3) Place the ruler along the edge opposite to the right angle of the set square.



(4) Hold the ruler fixed. Slide the set square along the ruler till the point R touches the other arm of the set square.



(5) Draw a line along this edge of the set square which will be passing through R. It is the required line, which is perpendicular to \overline{PQ} .



Question 3:

Draw a line l and point X on it. Through X, draw a line segment \overline{XY} perpendicular to l .

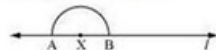
Now draw a perpendicular to \overline{XY} at Y. (use ruler and compasses)

Answer:

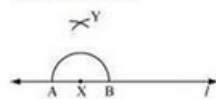
(1) Draw a line l and mark a point X on it.



(2) Taking X as centre and with a convenient radius, draw an arc intersecting line l at two points A and B.



(3) With A and B as centres and a radius more than AX, construct two arcs intersecting each other at Y.



(4) Join XY. \overline{XY} is perpendicular to l .

***** END *****