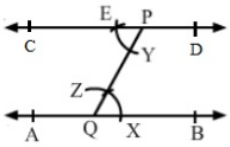
Exercise 17A

Q1

Answer :

Steps of construction:

1. Draw a line AB.
2. Take a point Q on AB and a point P outside AB, and join PQ.
3. With Q as the centre and any radius, draw on arc to cut AB at X and PQ at Z.
4. With P as the centre and the same radius, draw an arc cutting QP at Y .
5. With Y as the centre and the radius equal to XZ, draw an arc to cut the previous arc at E.
6. Join PE and produce it on both the sides to get the required line.



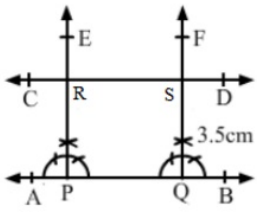
Q2

Answer :

Steps for construction:

1. Let AB be the given line.
2. Take any two points P and Q on AB.
3. Construct $\angle BPE = 90^\circ$ and $\angle BQF = 90^\circ$
4. With P as the centre and the radius equal to 3.5 cm, cut PE at R.
5. With Q as the centre and the radius equal to 3.5cm, cut QF at S.
6. Join RS and produce it on both the sides to get the required line, parallel to

AB and at a distance of 3.5 cm from it.



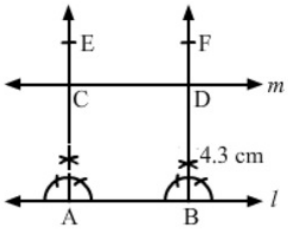
Q3

Answer :

Steps of construction:

1. Let l be the given line.
2. Take any two points A and B on line l.
3. Construct $\angle BAE = 90^\circ$ and $\angle ABF = 90^\circ$
4. With A as the centre and the radius equal to 4.3 cm, cut AE at C.
5. With B as the centre and the radius equal to 4.3 cm, cut BF at D.
6. Join CD and produce it on either side to get the required line m, parallel to

l and at a distance of 4.3 cm from it.



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