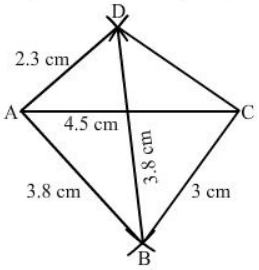
Practical Geomentry (constructions) Ex 18.2 Q1

Answer :

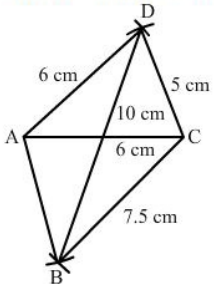
Steps of construction :
Step I : Draw AC = 6 cm.
Step II : With A as the centre and radius 3.8 cm, draw an arc.
Step III : With C as the centre and radius 3.0 cm, draw an arc to intersect the arc drawn in Step II at B.
Step IV : With B as the centre and radius 3.8 cm, draw an arc on the other side of AC.
Step V : With A as the centre and radius 2.3 cm, draw an arc to intersect the arc drawn in Step IV at D.
Step VI : Join BA, DA, BC and CD to obtained the required quadrilateral.



Practical Geomentry (constructions) Ex 18.2 Q2

Answer :

Steps of construction :
Step I : Draw AC = 6 cm.
Step II : With A as the centre and radius 6 cm, draw an arc.
Step III : With C as the centre and radius 5 cm, draw an arc to intersect the arc drawn in Step II at D.
Step IV : With D as the centre and radius 10 cm, draw an arc on the other side of the line segment AC.
Step V : With C as the centre and radius 7.5 cm, draw an arc to intersect the arc drawn in Step IV at B.
Step VI : Join BA, DA, BC and CD to obtained the required quadrilateral.



Practical Geomentry (constructions) Ex 18.2 Q3

Answer :

If we consider a triangle ABD from the given data, then
AB = 3 cm
BD = 4 cm
AD = 7.5 cm
AB + BD = 3 + 4 = 7 cm
However, we know that the sum of the lengths of two sides of a triangle is always greater than the third side.
Therefore, construction is not possible from the given data.

********** END **********