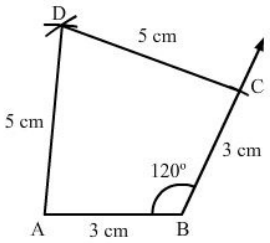
Practical Geomentry (constructions) Ex 18.3 Q4

Answer :

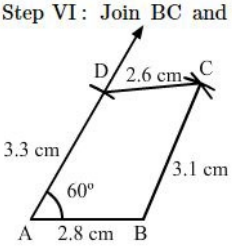
Steps of construction :
Step I : Draw AB = 3 cm.
Step II : Construct ∠ABC = 120°.
Step III : With B as the centre and radius 3 cm, cut off BC = 3 cm.
Step IV : With C as the centre and radius 5 cm, draw an arc.
Step V : With A as the centre and radius 5 cm, draw an arc to intersect the arc drawn in Step IV at D.
Step VI : Join AD and CD to obtained the required quadrilateral.



Practical Geomentry (constructions) Ex 18.3 Q5

Answer :

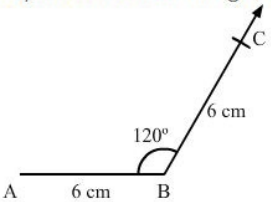
Steps of construction :
Step I : Draw AB = 2.8 cm.
Step II : Construct ∠BAD = 60°.
Step III : With A as the centre and radius 3.3 cm, cut off AD = 3.3 cm.
Step IV : With D as the centre and radius 2.6 cm, draw an arc.
Step V : With B as the centre and radius 3.1 cm, draw an arc to intersect the arc drawn in Step IV at C.
Step VI : Join BC and CD to obtained the required quadrilateral.



Practical Geomentry (constructions) Ex 18.3 Q6

Answer :

Steps of construction :
Step I : Draw AB = 6 cm.
Step II : Construct ∠ABC = 120°.
Step III : With B as the centre and radius 6 cm, cut off BC = 6 cm.
Now, we can see that AC is about 10.3 cm which is greater than AD + CD = 4.5 + 4.5 = 9 cm.
We know that sum of the lengths of two sides of triangle is always greater than the third side but here, the sum of AD and CD is less than AC.
So, construction of the given quadrilateral is not possible.



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