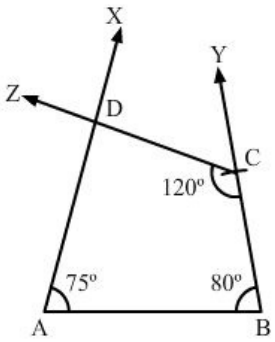
Practical Geomentry (constructions) Ex 18.5 Q1

Answer :

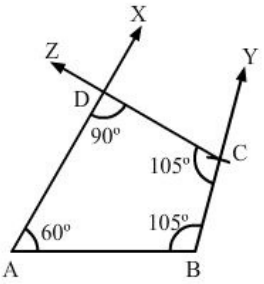
Steps of construction :
Step I : Draw AB = 4 cm.
Step II : Construct ∠XAB = 75° at A and ∠ABY = 80° at B.
Step III : With B as the centre and radius 3 cm, cut off BC = 3 cm.
Step IV : At C, draw ∠BCZ = 120° such that it meets AX at D.
The quadrilateral so obtained is the required quadrilateral.



Practical Geomentry (constructions) Ex 18.5 Q2

Answer :

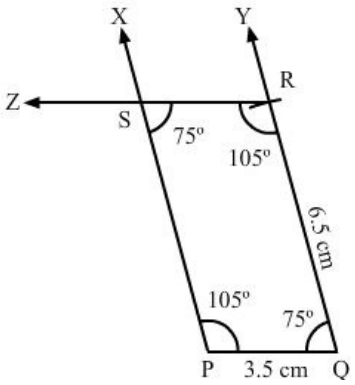
We know that the sum of all the angles in a quadrilateral is 360.
i.e., ∠A + ∠B + ∠C + ∠D = 360°
⇒ ∠C = 105°
Steps of construction :
Step I : Draw AB = 5.5 cm.
Step II : Construct ∠XAB = 60° at A and ∠ABY = 105°.
Step III : With B as the centre and radius 3.7 cm, cut off BC = 3.7 cm.
Step IV : At C, draw ∠BCZ = 105° such that it meets AX at D.
The quadrilateral so obtained is the required quadrilateral.



Practical Geomentry (constructions) Ex 18.5 Q3

Answer :

We know that the sum of all the angles in a quadrilateral is 360.
i.e., $\angle P + \angle Q + \angle R + \angle S = 360^\circ$
$\Rightarrow \angle Q = 75^\circ$
Steps of construction :
Step I : Draw $PQ = 3.5$ cm.
Step II : Construct $\angle XPQ = 105^\circ$ at P and $\angle PQY = 75^\circ$ at Q.
Step III : With Q as the centre and radius 6.5 cm, cut off $QR = 6.5$
Step IV : At R, draw $\angle QRZ = 105^\circ$ such that it meets PX at S.
The quadrilateral so obtained is the required quadrilateral.



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