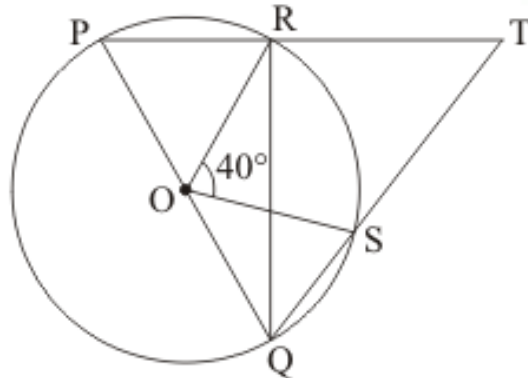




Circles Ex 16.4 Q9

Answer :

It is given that O is the center and $\angle SOR = 40^\circ$



We have $\angle RQS = \frac{1}{2} \angle ROS = 20^\circ$

In right angled triangle TRQ we have

$$\angle QRT + \angle RQS + \angle RTQ = 180^\circ$$

$$90^\circ + 20^\circ + \angle RTQ = 180^\circ$$

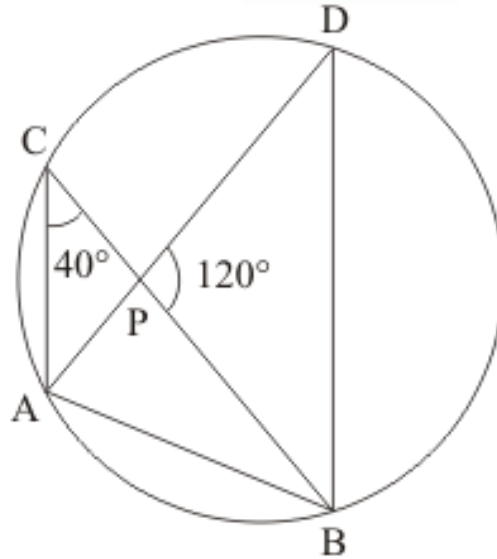
$$\angle RTQ = 70^\circ$$

Hence $\boxed{\angle RTQ = 70^\circ}$

Circles Ex 16.4 Q10

Answer :

It is given that $\angle ACP = 40^\circ$ and $\angle BPD = 120^\circ$



Construction: - meet the point A to B

So $\angle ACB = \angle ADB$ (arc of same segment)

$$\angle ACB = \angle ADB = 40^\circ \text{ (Given)}$$

Now in $\triangle ADB$ we have

$$\angle BPD + \angle PDB + \angle PBD = 180^\circ$$

$$120^\circ + 40^\circ + \angle PBD = 180^\circ$$

$$\angle PBD = 180^\circ - 160^\circ$$

$$= 20^\circ$$

Hence $\boxed{\angle CBD = 20^\circ}$

***** END *****