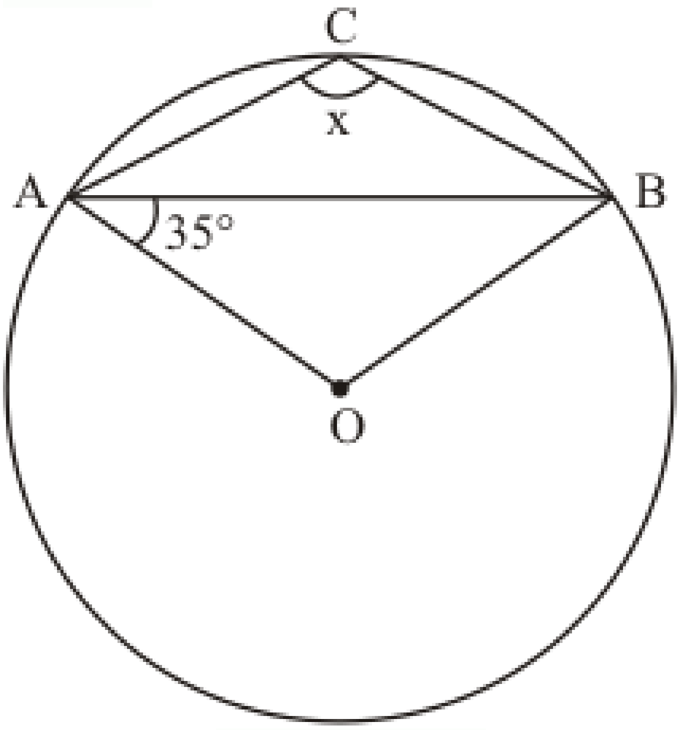
(v) It is given that $\angle OAC = 35^0$

ΔAOB Is isosceles triangle



Therefore $\angle ABO = 35^0$

And

$$\begin{aligned} \angle ABO + \angle OAC + \angle AOB &= 180^0 \\ 70^0 + \angle AOB &= 180^0 \\ \angle AOB &= 180^0 - 70^0 \\ &= 110^0 \end{aligned}$$

So reflection

$$\angle AOB = 2(ACB)$$

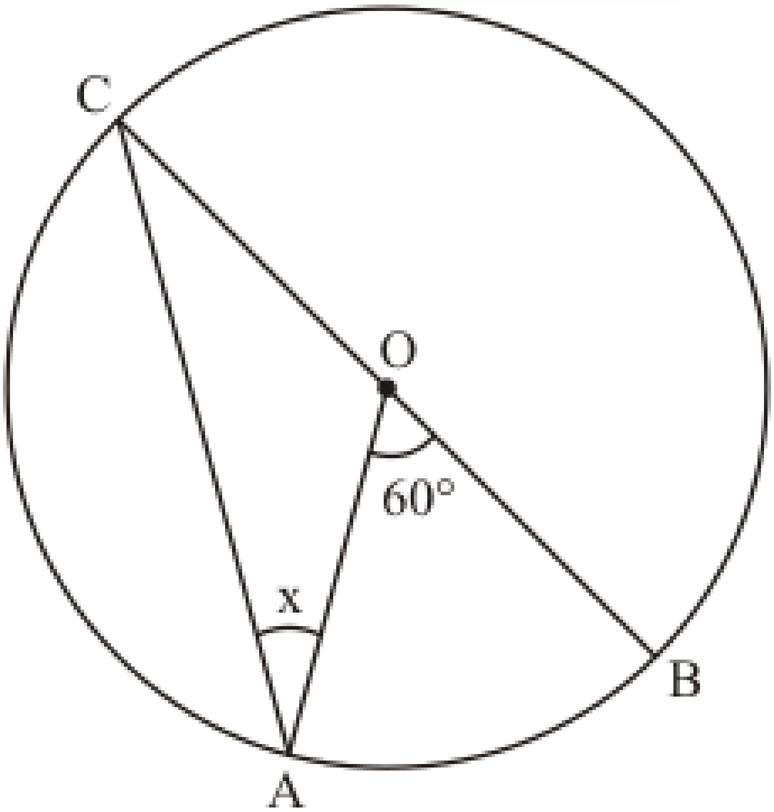
$$\angle ACB = \frac{1}{2}(360^0 - 110^0)$$

$$= \frac{1}{2}\left(250^0\right)$$

$$= 125^0$$

Hence $\boxed{x = 125^0}$

(vi) It is given that $\angle AOB = 60^0$



And

$$\angle COA + \angle AOC = 180^0$$

$$\angle COA = 180^0 - 60^0$$

$$= 120^0$$

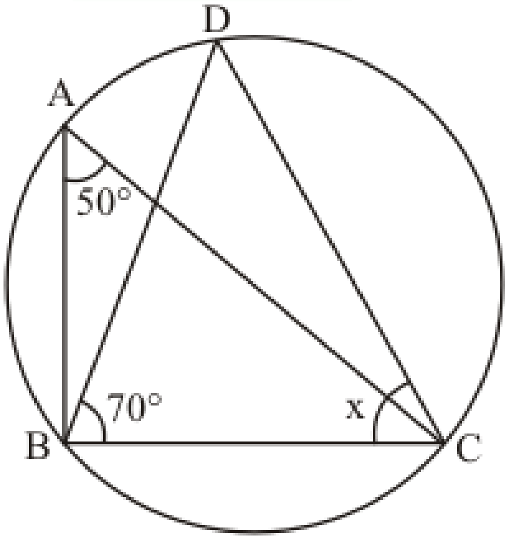
ΔABO Is isosceles triangle

So

$$\angle CAO = \frac{1}{2}\left(180^0 - 120^0\right)$$
$$= 30^0$$

Hence $\boxed{x = 30^0}$

(vii) $\angle BAC = \angle BDC$ (Given that $\angle BAC = 50^0$)

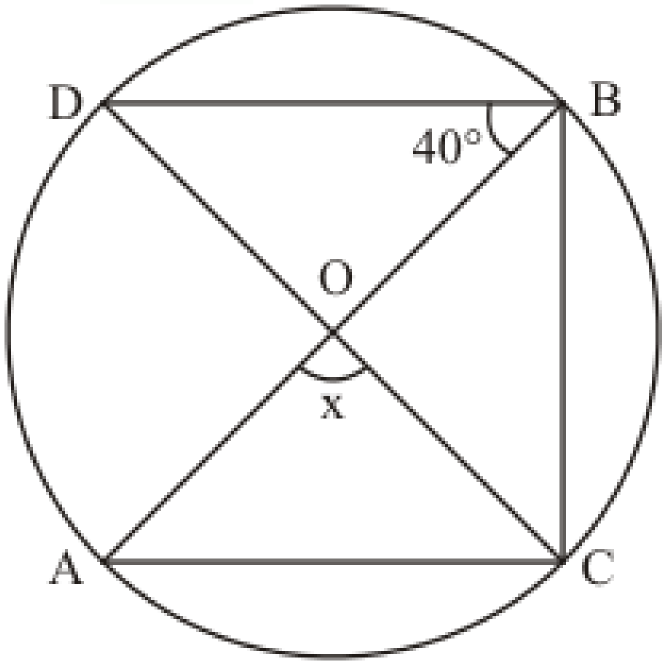


In ΔBDC we have

$$\angle DBC + \angle BDC + \angle BCD = 180^0$$
$$70^0 + 50^0 + \angle BCD = 180^0$$
$$\angle BCD = 180^0 - 120^0$$
$$= 60^0$$

Hence $\boxed{x = 60^0}$

(viii) ΔDOB Is isosceles triangle



Because $OD = OB$ (radius of circle)

$$\angle ODB + \angle OBD + \angle DOB = 180^0$$
$$40^0 + 40^0 + \angle DOB = 180^0$$
$$\angle DOB = 180^0 - 80^0$$
$$= 100^0$$

So $\angle AOC = \angle DOB$ (vertical angle)

Hence $\boxed{x = 100^0}$

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