



Lines and angles Ex 14.1 Q23

**Answer :**

Adjacent angles:

$\angle DOA$  and  $\angle DOC$

$\angle DOC$  and  $\angle BOC$

$\angle AOD$  and  $\angle DOB$

$\angle BOC$  and  $\angle AOC$

Linear pairs of angles:

$\angle AOD$  and  $\angle DOB$

$\angle BOC$  and  $\angle AOC$

Lines and angles Ex 14.1 Q24

Answer :

$$\angle AOD + \angle DOC + \angle COB = 180^\circ \left( \text{Linear pair} \right)$$

$$\left( x + 10 \right)^\circ + x^\circ + \left( x + 20 \right)^\circ = 180^\circ$$

$$3x + 30^\circ = 180^\circ$$

$$3x = 180^\circ - 30^\circ$$

$$3x = 150^\circ$$

$$x = \frac{150^\circ}{3} = 50^\circ$$

$$\angle BOC = x + 20^\circ = 50^\circ + 20^\circ = 70^\circ$$

$$\angle COD = x = 50^\circ$$

$$\angle AOD = x + 10^\circ = 50^\circ + 10^\circ = 60^\circ$$

\*\*\*\*\* END \*\*\*\*\*