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 :

$$\angle AOD + \angle DOC + \angle COB = 180° \left(Linear\ pair \right)$$

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

$$3x + 30° = 180°$$
$$3x = 180° - 30°$$
$$3x = 150°$$
$$x = \frac{150°}{3} = 50°$$

$$\angle BOC = x + 20° = 50° + 20° = 70°$$
$$\angle COD = x = 50°$$
$$\angle AOD = x + 10° = 50° + 10° = 60°$$

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