Lines and angles Ex 14.1 Q30

Answer :

$\angle z = \angle x = 45^\circ$ (Vertically opposite angles)

Now,

$\angle x + \angle y = 180^\circ$ (Linear pair)

$\Rightarrow \angle y = 180^\circ - 45^\circ = 135^\circ$

$\angle u = \angle y = 135^\circ$ (Vertically opposite angles)

Lines and angles Ex 14.1 Q31

Answer :

$\angle BOD + \angle DOF + \angle FOA = 180^\circ$ (Linear pair)

$\therefore \angle FOA = \angle u = 180^\circ - 90^\circ - 50^\circ = 40^\circ$

$\angle FOA = \angle x = 40^\circ$ (Vertically opposite angles)

$\angle BOD = \angle z = 90^\circ$ (Vertically opposite angles)

$\angle EOC = \angle y = 50^\circ$ (Vertically opposite angles)

Lines and angles Ex 14.1 Q32

Answer :

$\angle y = 25^\circ$ (Vertically opposite angles)

Since $\angle x + \angle y = 180^\circ$ (Linear pair)

$\therefore \angle x = 180^\circ - 25^\circ = 155^\circ$

$\angle z = \angle x = 155^\circ$ (Vertically opposite angles)

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