

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 *******