Lines and angles Ex 14.2 Q19

Answer :

$\angle x + 125^\circ = 180^\circ$ (Linear pair)
$\therefore \angle x = 180^\circ - 125^\circ = 55^\circ$

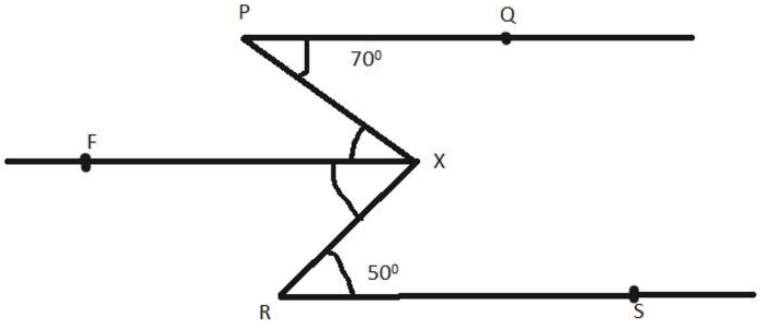
$\angle z = 125^\circ$ (Corresponding angles)
$\angle x + \angle z = 180^\circ$ (Sum of adjacent interior angles is 180°)
$\angle x + 125^\circ = 180^\circ$
$\Rightarrow \angle x = 180^\circ - 125^\circ = 55^\circ$

$\angle x + \angle y = 180^\circ$ (Sum of adjacent interior angles is 180°)
$55^\circ + \angle y = 180^\circ$
$\Rightarrow \angle y = 180^\circ - 55^\circ = 125^\circ$

Lines and angles Ex 14.2 Q20

Answer :

Draw a line parallel to *PQ* passing through *X*.



Here,
$\angle PQX = \angle PXF = 70^\circ$ and $\angle SRX = \angle RXF = 50^\circ$ (Alternate interior angles)
$\because$ PQ || RS || XF
$\therefore \angle PXR = \angle PXF + \angle FXR = 70^\circ + 50^\circ = 120^\circ$

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