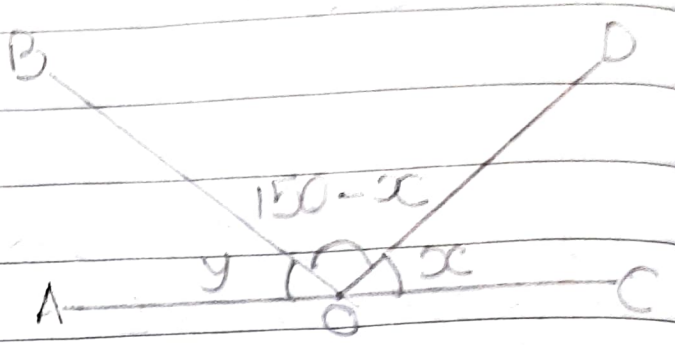
HW
30/09/21

LINES AND ANGLES

Exercise → 14(A)

Q(4) Find y in the given figure.



Ans → $\angle BOA + \angle BOD + \angle DOC = 180^\circ$

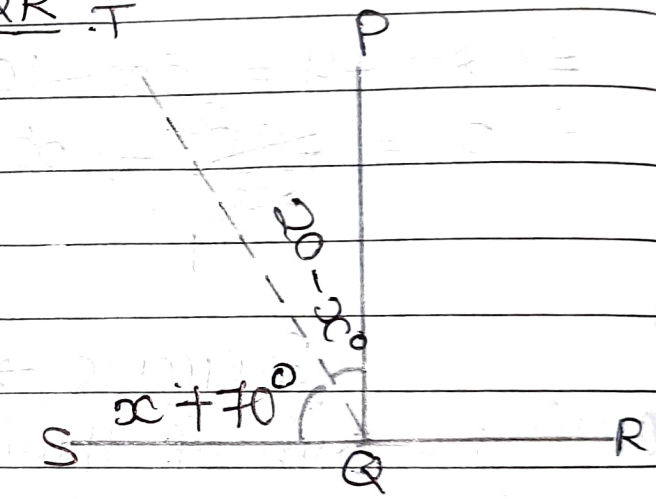
$\Rightarrow y + 150 - x + x = 180^\circ$

$\Rightarrow y + 150 = 180^\circ$

$\Rightarrow y = 180^\circ - 150 = 30^\circ$

$\therefore y = 30^\circ$

Q(5) In the given figure, find $\angle PQR$.



Ans → Let $\angle PQR$ be 'y'.

$\therefore \angle SQT + \angle TQP + \angle PQR = 180^\circ$

$\Rightarrow x^\circ + 70^\circ + 20 - x^\circ + y = 180^\circ$

$\Rightarrow 90^\circ + y = 180^\circ$

$\Rightarrow y = 180^\circ - 90^\circ = 90^\circ$

$\therefore \angle PQR = 90^\circ$

Q(6) In the given figure, $p^0 = q^0 = r^0$, find each.

Ans→ It is given as $p^0 = q^0 = r^0$

Let us assume all the angles as 'r^0'

$p^0 + q^0 + r^0 = 180^0$

$\Rightarrow r^0 + r^0 + r^0 = 180^0$

$\Rightarrow 3r^0 = 180^0$

$\Rightarrow r^0 = \frac{180^0}{3} = 60^0 \Rightarrow p^0 = q^0 = r^0 = 60^0$