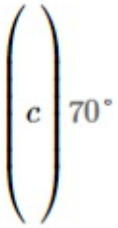
Exercise 17C

Q19

Answer :



$$\text{Here, } \angle ACE = \angle BAC = 50^0 \ \left[\text{alternate angles}\right]$$

$$\angle ACB + \angle ACE + \angle DCE = 180^\circ \ \text{(linear pair)}$$

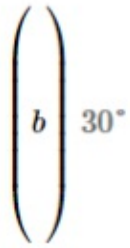
$$\angle ACB = 180^0 - \left(50^\circ + 60^\circ\right)$$

$$= 180^\circ - 110^\circ$$

$$= 70^\circ$$

Q20

Answer :



$$\angle A + \angle B + \angle C = 180^0$$

$$\Rightarrow \angle B = 180^0 - \left(65^0 + 85^0\right)$$

$$\Rightarrow \angle B = 180^0 - 150^0$$

$$\Rightarrow \angle B = 30^0$$

Q21

Answer :

(d) 1800

Q22

Answer :

(c) 360^0

Q23

Answer :

(b) 90°

Draw a parallel line through O and produce AB and CD on R and P, respectively.

$\therefore \angle OCD = \angle COQ = 120^0$ (alternate angles)

$\angle COS = 180^0 - 120^0$ (linear pair)

$= 60^0$

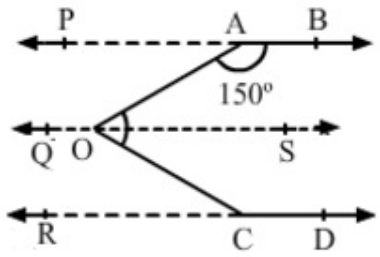
Similarly, $\angle AOQ = \angle BAO = 150^0$ (alternate angles)

$\angle AOS = 180^o - 150^0$ (linear pair)

$= 30^0$

$\angle AOC = \angle AOS + \angle COS$

$\therefore \angle AOC = 60^0 + 30^0 = 90^0$



Q24

Answer :

(a) 40°

$\angle PAC = \angle ACS = 100^0$ [alternate angles]

$\angle PAB + \angle BAC = 100^0$

$\Rightarrow \angle BAC = 100^\circ - 60^\circ = 40^\circ$

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