



### Exercise 17C

Q19

Answer :

$$\left( \begin{array}{c} c \end{array} \right) 70^\circ$$

Here,  $\angle ACE = \angle BAC = 50^\circ$  [ alternate angles ]

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

$$\begin{aligned} \angle ACB &= 180^\circ - (50^\circ + 60^\circ) \\ &= 180^\circ - 110^\circ \\ &= 70^\circ \end{aligned}$$

Q20

Answer :

$$\left( \begin{array}{c} b \end{array} \right) 30^\circ$$

$$\begin{aligned} \angle A + \angle B + \angle C &= 180^\circ \\ \Rightarrow \angle B &= 180^\circ - (65^\circ + 85^\circ) \\ \Rightarrow \angle B &= 180^\circ - 150^\circ \\ \Rightarrow \angle B &= 30^\circ \end{aligned}$$

# Q21

# Answer :

(d) 1800

Q22

**Answer :**

(c)  $360^0$

Q23

**Answer :**

(b)  $90^{\circ}$

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

$$\therefore \angle OCD = \angle COQ = 120^\circ \text{ (alternate angles)}$$

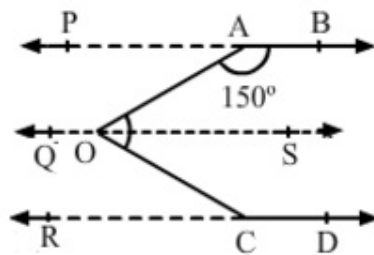
$$\begin{aligned} \angle COS &= 180^\circ - 120^\circ \text{ (linear pair)} \\ &= 60^\circ \end{aligned}$$

$$\text{Similarly, } \angle AOQ = \angle BAO = 150^\circ \text{ (alternate angles)}$$

$$\begin{aligned} \angle AOS &= 180^\circ - 150^\circ \text{ (linear pair)} \\ &= 30^\circ \end{aligned}$$

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

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



Q24

Answer :

$$\left( \begin{array}{c} \text{a} \end{array} \right) 40^\circ$$

$$\angle PAC = \angle ACS = 100^\circ \text{ [alternate angles]}$$

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

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

\*\*\*\*\* END \*\*\*\*\*