Ex - 14. A

23. $5x + x + 80° + 123° + 85° = 360°$ (angle at a point)

$\Rightarrow 6x + 80° + 123° + 85° = 360°$

$\Rightarrow 6x + 288° = 360°$

$\Rightarrow 6x + 360° - 288° = 72°$

$x = \frac{72°}{6} = 12°$

$\angle AOB = 5x = 5 \times 12° = 60°$

$\angle BOC = x = 12°$

24. $3\frac{1}{2}y^\circ + 2y^\circ + 2y^\circ + 2\frac{1}{2}y^\circ = 360^\circ$ (Angle at a point)

$\Rightarrow \frac{7}{2}y^\circ + 2y^\circ + 2y^\circ + \frac{5}{2}y^\circ = 360^\circ$

$\Rightarrow \frac{7}{2}y^\circ + \frac{5}{2}y^\circ + 4y^\circ = 360^\circ$

$\Rightarrow \frac{12}{2}y^\circ + 4y^\circ = 360^\circ$

$\Rightarrow 6y^\circ + 4y^\circ = 360^\circ$

$\Rightarrow 10y^\circ = 360^\circ$

$y = \frac{360^\circ}{10} = 36^\circ$

$\angle AOB = 3\frac{1}{2}y^\circ = \frac{7}{2}y^\circ = \frac{7}{2} \times 36^\circ = 126^\circ$

$\angle BOC = 2y^\circ = 2 \times 36^\circ = 72^\circ$

$\angle COD = 2y^\circ = 72^\circ$

$\angle DOA = 2\frac{1}{2}y^\circ = \frac{5}{2}y^\circ = \frac{5}{2} \times 36^\circ = 90^\circ$