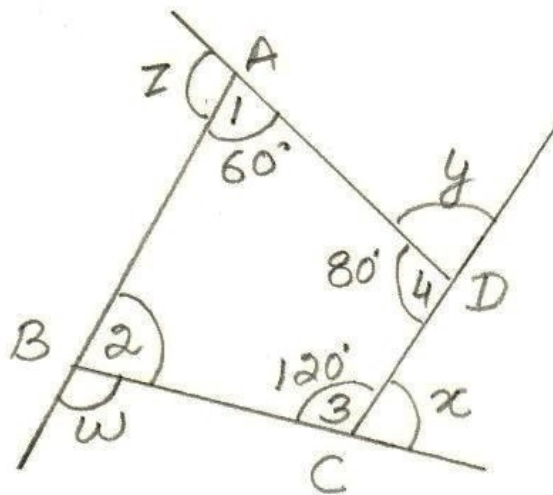


VIII - Ch 1 Rational Numbers Ex 3.1

NCERT Solutions by Dev Anoop (Bathinda)



In $\square ABCD$

$$\angle 1 + \angle 2 + \angle 3 + \angle 4 = 360 \text{ (angle sum prop. of } \Delta \text{)}$$

$$60^\circ + \angle 2 + 120^\circ + 80^\circ = 360^\circ$$

$$\Rightarrow 260 + \angle 2 = 360$$

$$\Rightarrow \angle 2 = 360 - 260 \\ = 100^\circ$$

$$\angle 1 + z = 180^\circ \dots \textcircled{i} \text{ (linear pair)}$$

$$\angle 2 + w = 180^\circ \dots \textcircled{ii} \text{ (do)}$$

$$\angle 3 + x = 180^\circ \dots \textcircled{iii} \text{ (do)}$$

$$\angle 4 + y = 180^\circ \dots \textcircled{iv} \text{ (do)}$$

$$\textcircled{i} + \textcircled{ii} + \textcircled{iii} + \textcircled{iv}$$

$$\angle 1 + \angle 2 + \angle 3 + \angle 4 + x + y + z + w = 720$$

$$60 + 100 + 120 + 80 + x + y + z + w = 720$$

$$\Rightarrow x + y + z + w = 720 - 360 \\ = 360^\circ$$