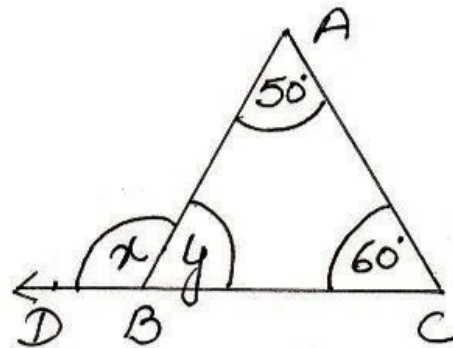


2 (iii)



$$\angle ABD = \angle A + \angle C \text{ (exterior } \angle \text{ prop. of } \Delta)$$

$$x = 50^\circ + 60^\circ$$

$$\Rightarrow x = 110^\circ$$

$$\angle ABD + \angle ABC = 180^\circ \text{ (linear pair)}$$

$$x + y = 180^\circ$$

$$110^\circ + y = 180^\circ$$

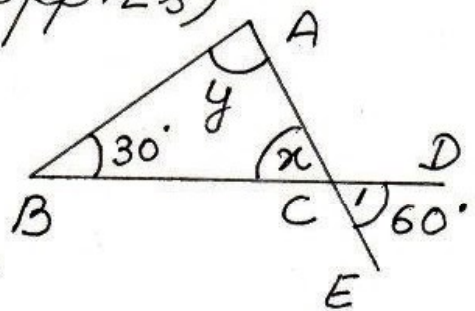
$$\Rightarrow y = 180 - 110$$

$$= 70^\circ$$

2 (iv) $\angle C = \angle ACD$ (vertically opp. \angle s)

$$60^\circ = x$$

In ΔABC



$$\angle A + \angle B + \angle ACB = 180^\circ$$

(angle sum prop. of Δ)

$$y + 30^\circ + x = 180^\circ$$

$$y + 30 + 60 = 180^\circ$$

$$\Rightarrow y = 180 - 90$$

$$= 90^\circ$$