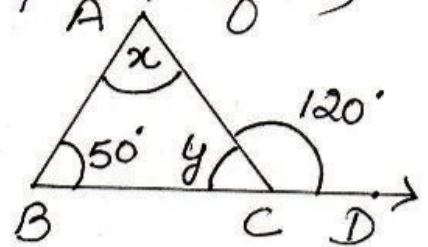


2 ① $\angle ACD = \angle A + \angle B$ (exterior \angle prop of Δ)

$$120^\circ = x + 50^\circ$$

$$\Rightarrow x = 120^\circ - 50^\circ$$

$$= 70^\circ$$



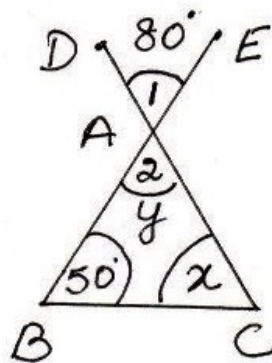
$\angle ACD + \angle ACB = 180^\circ$ (linear pair)

$$120^\circ + y = 180^\circ$$

$$\Rightarrow y = 180 - 120$$

$$= 60^\circ$$

2 ②



$\angle 2 = \angle 1$ (vertically opposite \angle s)

$$y = 80^\circ$$

In ΔABC

$\angle 2 + \angle B + \angle C = 180^\circ$ (angle sum prop of Δ)

$$y + 50^\circ + x = 180^\circ$$

$$80 + 50 + x = 180$$

$$\Rightarrow x = 180 - 130$$

$$= 50^\circ$$