

2(ii) ABCD is a ||gm

$$\angle L = \angle D = 50^\circ \quad (*)$$

$$\angle L + \angle Z = 180^\circ \quad (\text{linear pair})$$

$$50 + \angle Z = 180$$

$$\Rightarrow \angle Z = 180 - 50$$

$$\Rightarrow \angle Z = 130^\circ$$

$$\angle A = \angle C \quad (*)$$

$$\angle x = \angle y \quad \dots \textcircled{1}$$

$$\angle A + \angle L + \angle C + \angle D = 360^\circ \quad (\text{angle sum property of } \square)$$

$$\angle x + 50 + \angle y + 50 = 360$$

$$\Rightarrow \angle x + \angle x = 360 - 100 \quad (\because \angle x = \angle y)$$

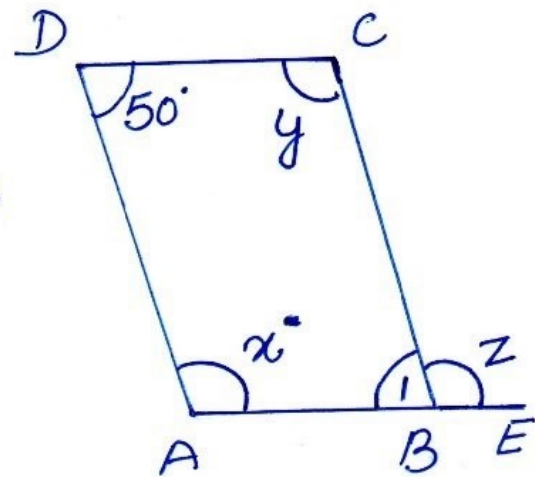
$$\Rightarrow 2\angle x = 200$$

$$\Rightarrow \angle x = \frac{200}{2}$$

$$\Rightarrow \angle x = 100$$

$$\therefore \angle x = \angle y = 100^\circ$$

$$\angle Z = 130^\circ$$



* opposite angles of a ||gm