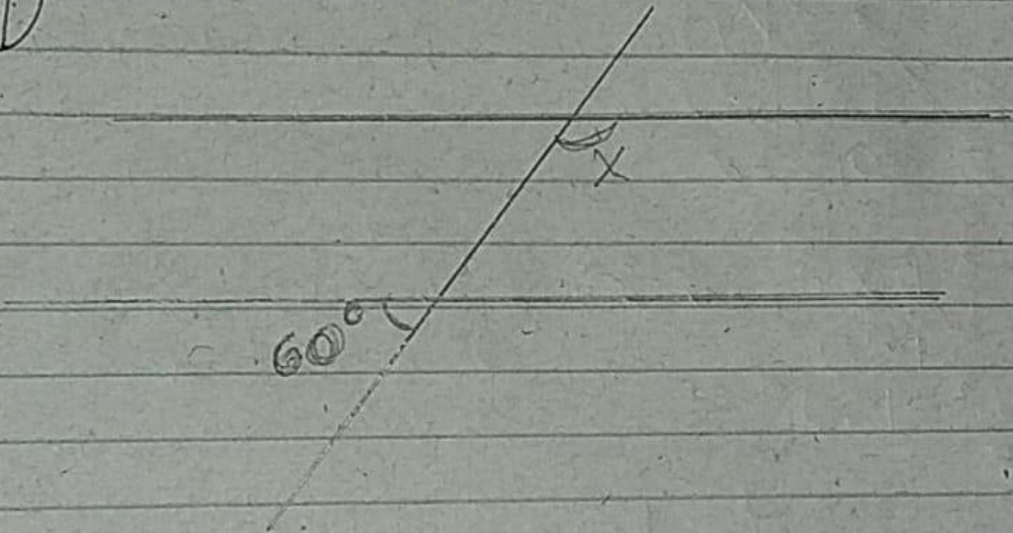




# Geometria Plana - ângulos internos

## Exercícios

①



$60^\circ$  é congruente com  $180^\circ - x$ .

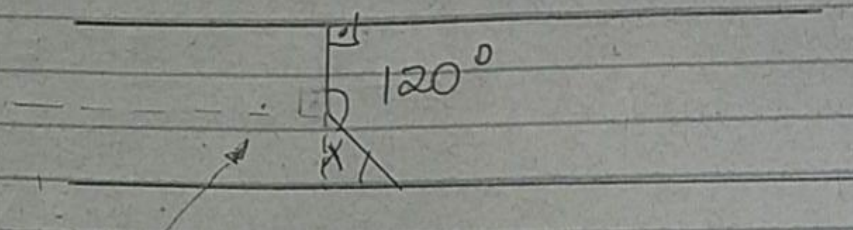
$$180^\circ - x = 60^\circ$$

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

$$\underline{x = 120^\circ}$$

Setra &

2



$$180 - 120 = 60$$

$$60^\circ + 90^\circ + x = 180^\circ \quad (\text{ângulos internos do triângulo})$$

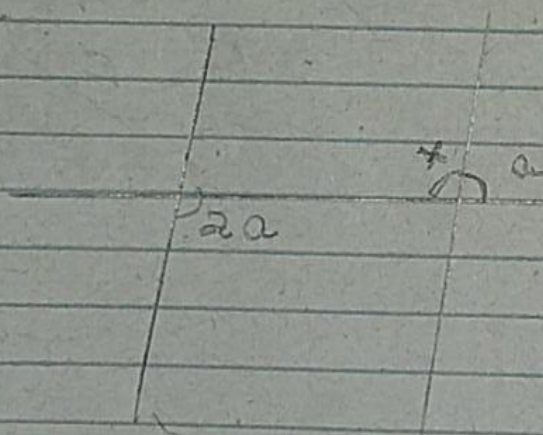
$$150^\circ + x = 180^\circ$$

$$x = 180^\circ - 150^\circ$$

$$\underline{x = 30^\circ}$$

Setra B

3



$$a + 2a = 180^\circ$$

$$a = 60^\circ$$

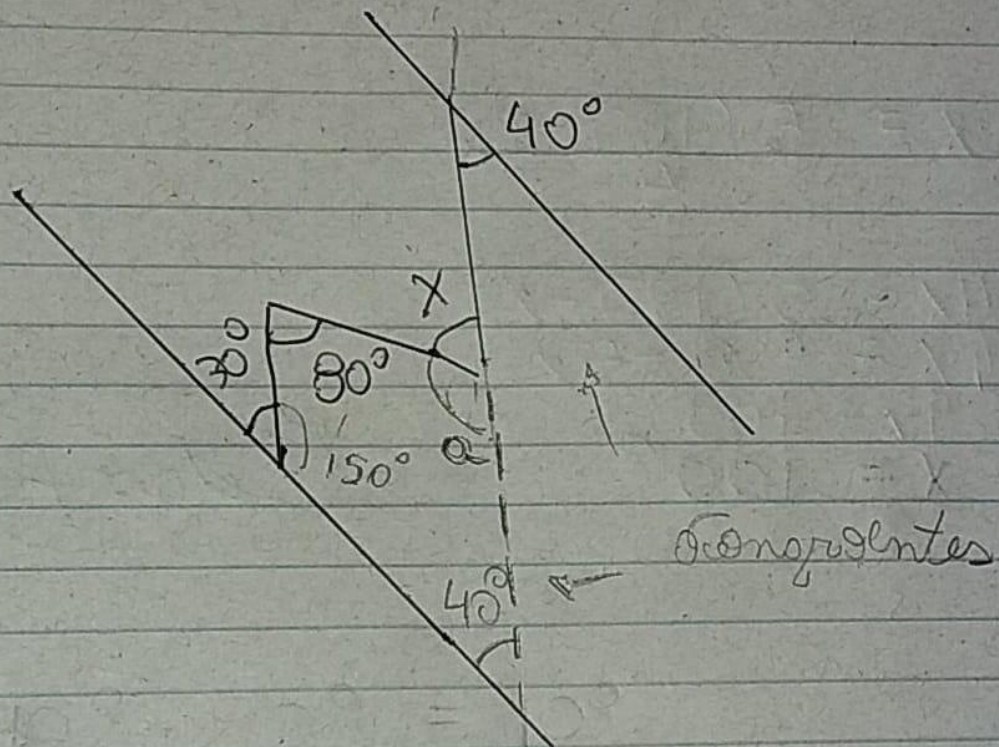
$$x + 60^\circ = 180^\circ$$

$$\underline{x = 120^\circ}$$

Setra D



④



$$150^\circ + 40^\circ + 80^\circ + a = 360^\circ$$

$$270^\circ + a = 360^\circ$$

$$a = 90^\circ$$

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

$$90^\circ + x = 180^\circ$$

$$\underline{x = 90^\circ}$$

⑤

$$x = \frac{5(180 - x)}{4}$$

$$4x = 5(180 - x)$$

$$4x = 900 - 5x$$

$$9x = 900$$

$$x = 100^\circ$$

Setra A

⑥

$$x = \frac{90 - x}{2}$$

$$2x = 90 - x$$

$$3x = 90$$

$$x = 30^\circ$$

Setra A

⑦

$$3(40 - x) = \frac{180 - x}{3}$$

$$9(40 - x) = 180 - x$$

$$360 - 9x = 180 - x$$

$$-8x = -180$$

$$x = 22.5^\circ$$

$$\frac{75}{x} = \frac{100}{60}$$

$$100x = 4500$$

$$x = 45'$$

$$x = 22^\circ 45'$$

Setra E