

"Lista 19 - Triângulos"

① Valor de $x = ?$ Soma dos ângulos = 180°

$$60 + 50 = 110 - 180 = 70$$

$$\hookrightarrow 70 + x = 180$$

$$x = 180 - 70$$

$$x = 110^\circ //$$

Letra C

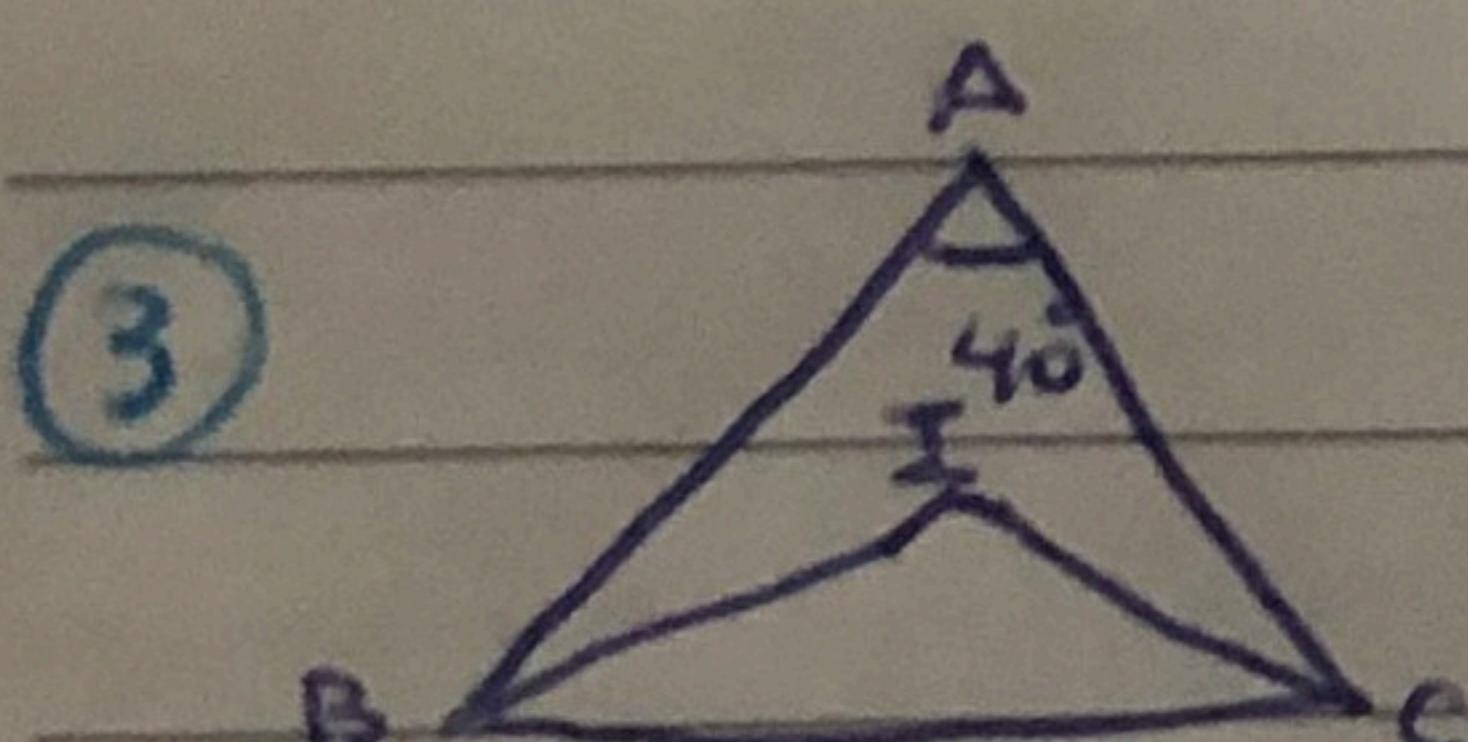
② Soma dos ângulos = 180°

$$\hookrightarrow 3x + 4x + 5x = 180$$

$$12x = 180$$

$$x = \frac{180}{12} = 15^\circ //$$

Letra E



$$BC = 180 - 40 = 140^\circ$$

BI e CI são bissetrizes, então:

$$\frac{BC}{2} \Rightarrow \frac{140}{2} = 70^\circ$$

$$BIC + 70 = 180$$

$$BIC = 180 - 70$$

$$BIC = 110^\circ //$$

Letra D

④ Medida BD = ? $BD = x$

Triângulo ABD

$$(2,3) < x < (2+3) \rightarrow 1 < x < 5$$

Letra E

Triângulo BCD

$$(2-5) < x < (2+5) \rightarrow 3 < x < 7$$

$3 < x < 5 \Rightarrow$ dentro deste intervalo $BD = 4 //$

$$\textcircled{5} \quad 30 < x + y$$

$$64 < 2x + 2y + 2z$$

$$18 < x + z$$

$$32, \text{''} < x + y + z.$$

$$16 < 2 + y$$

Letra E

R: A soma deve ser maior que 32.

$$\textcircled{8} \quad x + x = 20^\circ 10'$$

$$2x = 20^\circ 10'$$

$$x = 10^\circ 05'$$

Letra B

$$x = \frac{20^\circ 10'}{2}$$

$$\textcircled{9} \quad \begin{aligned} EDB &= 180 - 10 - 90 \\ &= 80^\circ \end{aligned} \quad \left. \begin{array}{l} DB \text{ é bisetriz,} \\ DBC = 45^\circ \end{array} \right\}$$

$$\begin{aligned} CDB &= 180 - 80 \\ &= 100^\circ \end{aligned}$$

$$\left. \begin{array}{l} DCB = 180 - 100 - 45 = 35^\circ, \\ CAB = 180 - 90 - 35 = 55^\circ \end{array} \right\}$$