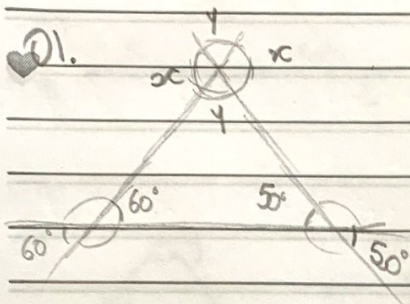


TAREFA: TRIANGULOS



$$60 + 50 + y = 180^\circ$$

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

$$y = 180 - 110$$

$$y = 70^\circ$$

$$70 - 70 + 2x = 360^\circ$$

$$140 + 2x = 360^\circ$$

$$2x = 360^\circ - 140^\circ$$

$$2x = 220$$

$$x = \frac{220}{2}$$

$$x = 110$$

R: C

02. $3x + 4x + 5x = 180^\circ$

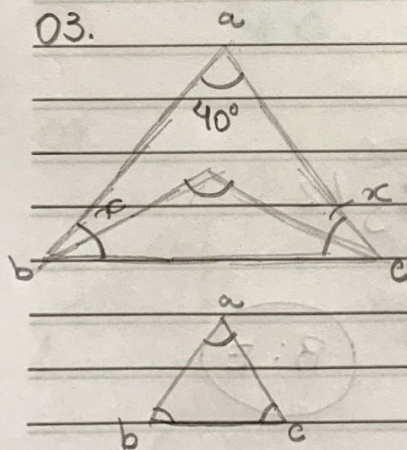
$$12x = 180^\circ$$

$$x = \frac{180}{12}$$

$$x = 15^\circ$$

R: E

03.



$B = C$, por conta das bissetrizes.

$$40^\circ + x + x = 180^\circ$$

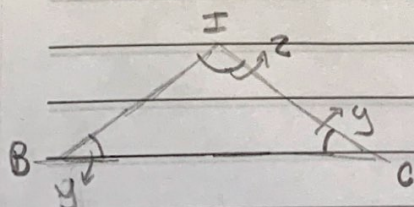
$$40 + 2x = 180^\circ$$

$$2x = 180 - 40$$

$$2x = 140$$

$$x = \frac{140}{2}$$

$$x = 70^\circ$$



BI, CI: são metade do B e o C

$$y = \frac{70}{2} = 35^\circ$$

tilibra

$$3 + y + y = 180^\circ$$

$$3 + 2y = 180^\circ$$

$$3 + 2 \cdot 35 = 180^\circ$$

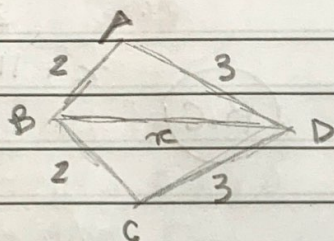
$$3 + 70 = 180^\circ$$

$$3 = 180 - 70$$

$$3 = 110$$

R: D

04.



$$BAD = (2-3) < x < 2+3$$

$$1 < x < 5$$

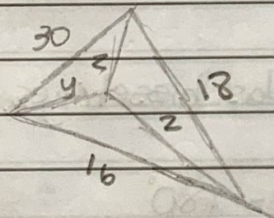
$$BCD = (2-3) < x < 2+3$$

$$3 < x < 7$$

$$\begin{cases} 3 < x < 5 \\ x = 4 \end{cases}$$

R: E

05.



$$30 < y + x$$

$$18 < x + 3$$

$$16 < y + 3$$

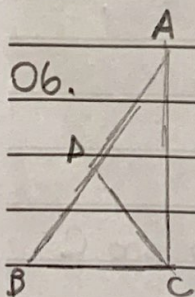
$$64 < 2y + 2x + 2 \quad | :2$$

$$32 < y + x + 3$$

$$+ > 32 = 33$$

R: E

06.

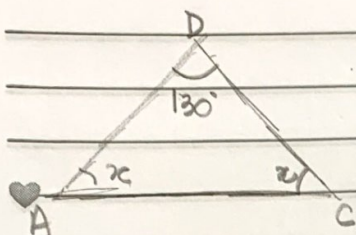


AD, CD = congruentes

CD, BC = perpendiculares

logo

$$\angle ADC = 130^\circ$$



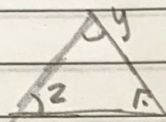
$$130^\circ + x + x = 180^\circ$$

$$130 + 2x = 180$$

$$2x = 180 - 130$$

$$2x = 50^\circ$$

$$x = 50 / 2 = 25^\circ \rightarrow A$$



$$3 + y + 90 = 180^\circ$$

$$3 + 50 + 90 = 180^\circ$$

$$z = 180 - 140$$

$$z = 40^\circ$$

$$z = 40^\circ$$

$\rightarrow B$

$$x = A = 25^\circ$$

$$3 = B = 40^\circ$$



$$A + B + C = 180^\circ$$

$$25 + 40 + C = 180^\circ$$

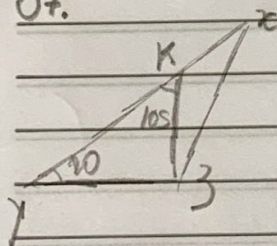
$$65 + C = 180^\circ$$

$$C = 180 - 65$$

$$C = 113^\circ$$

$\rightarrow C$

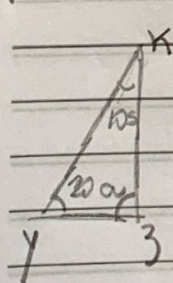
07.



$$y = 20$$

$$y + z = 105$$

$\angle 3, \angle K = \text{congruentes}$

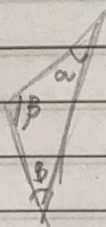


$$20 + 105 + a = 180^\circ$$

$$125 + a = 180$$

$$a = 180 - 125$$

$$a = 55^\circ$$



$$\beta + \beta + \alpha = 180$$

$$150 + \alpha = 180$$

$$\alpha = 180 - 150$$

$$\alpha = 30^\circ$$

$\rightarrow x$

$$105^\circ + \beta = 180$$

$$\beta = 180 - 105$$

$$\beta = 75$$

$$3 = a + \alpha$$

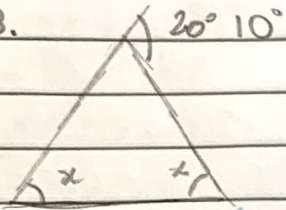
$$3 = 55 + 75$$

$$3 = 130^\circ$$

$\rightarrow z$

tilibra

08.



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

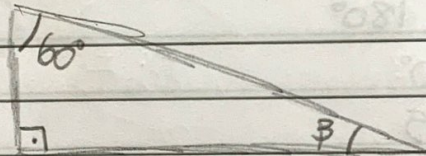
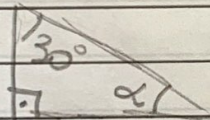
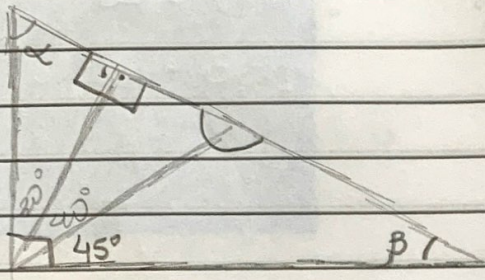
$$20^\circ 10' = 2x$$

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

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

$$x = 10^\circ 5'$$

09.



$$90^\circ + 30^\circ + \alpha = 180^\circ$$

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

$$\alpha = 180 - 120^\circ$$

$$\alpha = 60^\circ$$

$$\beta + 60 + 90 = 180^\circ$$

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

$$\beta = 180 - 150$$

$$\beta = 30^\circ$$