

Evelyn Santos de Santana

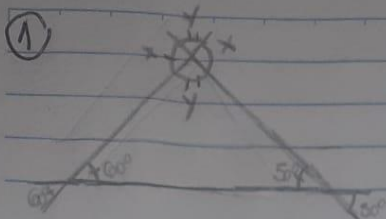
CTII348

Triângulos

data . . .

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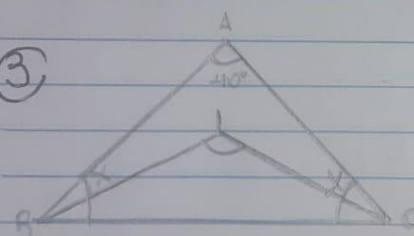
①


$$60^\circ + 50^\circ + y = 180^\circ$$
$$110 + y = 180^\circ$$
$$y = 180 - 110$$
$$y = 70^\circ$$
$$70^\circ + 70^\circ + 2x = 360^\circ$$
$$140 + 2x = 360^\circ$$
$$2x = 360^\circ - 140^\circ$$
$$2x = 220$$
$$x = \frac{220}{2} = 110$$

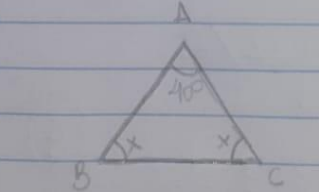
②

$$3x + 4x + 5x = 180^\circ$$
$$12x = 180^\circ$$
$$x = \frac{180^\circ}{12}$$
$$x = 15^\circ$$

③



B = C, por causa da bissetriz, então

$$40^\circ + x + x = 180^\circ$$
$$40^\circ + 2x = 180^\circ$$
$$2x = 180^\circ - 40^\circ$$
$$2x = 140^\circ$$
$$x = \frac{140^\circ}{2} = 70^\circ$$


B1 e C1 são metade dos ângulos de B e C, então

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

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

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

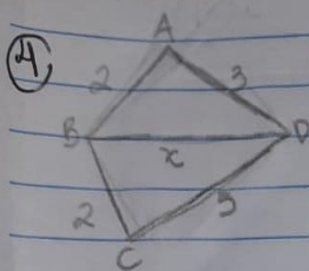
$$Z + 2 \cdot 35^\circ = 180^\circ$$

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

$$Z = 180^\circ - 70^\circ$$

$$Z = 110^\circ$$

(D)



BAD =

$$|2-3| < x < 2+3$$

$$1 < x < 5$$

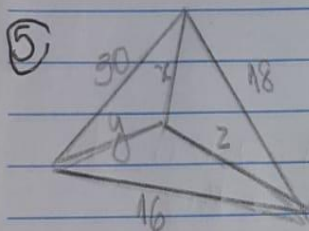
$$\left\{ \begin{array}{l} 3 < x < 5 \\ x = 4 \end{array} \right.$$

BCD =

$$|2-5| < x < 2+5$$

$$3 < x < 7$$

(E)



$$x + y + z = ?$$

$$30 < y + x$$

$$+ 18 < x + z$$

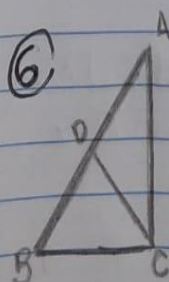
$$16 < y + z$$

$$64 < 2y + 2x + 2z \quad / 2$$

$$\Rightarrow 32 < y + x + z$$

(E)

A soma tem que ser maior que 32, ENTÃO É 33

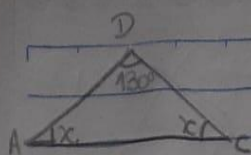


Ângulos de A, B e C = ?

AD e CD não são congruentes

CD e BC são perpendiculares

$$\angle ACB = 130^\circ$$



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

$$130^\circ + 2x = 180^\circ$$

$$2x = 180^\circ - 130^\circ$$

$$2x = 50^\circ$$

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

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

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

$$y = 180^\circ - 130^\circ$$

$$y = 50$$

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

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

$$z + 140^\circ = 180^\circ$$

$$z = 180^\circ - 140^\circ$$

$$z = 40^\circ$$

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

$$z = B = 40^\circ$$

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

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

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

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

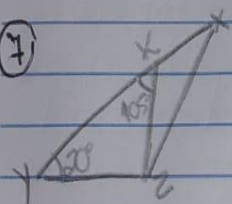
$$C = 115^\circ$$

$$A = 25^\circ$$

$$B = 40^\circ$$

$$C = 115^\circ$$

7)

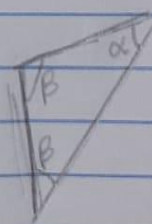
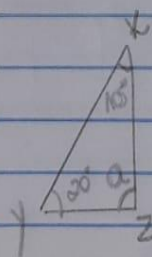


Ângulos de x e z

$$\hat{X} = 20^\circ$$

$$\hat{Y} = 105^\circ$$

XZ e XK são congruentes



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

$$125^\circ + a = 180^\circ$$

$$a = 180^\circ - 125^\circ$$

$$a = 55^\circ$$

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

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

$$\beta = 75^\circ$$

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

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

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

$$\alpha = 30^\circ$$

$$Z = a + \alpha$$

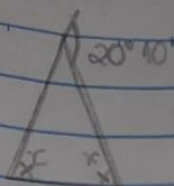
$$Z = 55 + 75$$

$$Z = 130^\circ$$

$$X = 30^\circ$$

$$Z = 130^\circ$$

8



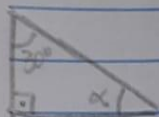
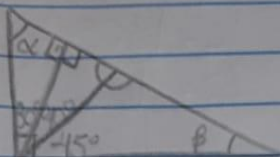
$$20^{\circ} 10' = x + x$$

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

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

$$1x = 10^{\circ} 5'$$

9

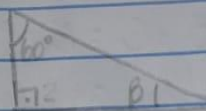


$$90^{\circ} + 30^{\circ} + \alpha = 180^{\circ}$$

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

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

$$\alpha = 60^{\circ}$$



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

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

$$\beta = 180^{\circ} - 150^{\circ}$$

$$\beta = 30^{\circ}$$