

Evelyn Santos de Santana

CTII348

Quadriláteros - Teorema de Tales - Teorema da Bissetriz Interna

data . . .

(S) (T) (Q) (Q) (S) (S) (D)

①

Ângulo $\widehat{CDA} = x$

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

$$150^\circ + 2\theta = 180^\circ$$

$$2\theta = 180^\circ - 150^\circ$$

$$2\theta = 30^\circ$$

$$\theta = 30^\circ / 2$$

$$\theta = 15^\circ$$

$$45^\circ + 15^\circ + x = 90^\circ$$

$$x + 60^\circ = 90^\circ$$

$$x = 90^\circ - 60^\circ$$

$$x = 30^\circ$$

②

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

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

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

$$a = 60^\circ$$

$$150^\circ - 2\theta = 180^\circ$$

$$2\theta = 180^\circ - 150^\circ$$

$$2\theta = 30$$

$$\theta = 30 / 2$$

$$\theta = 15$$

$$45 + 15 + \alpha = 180^\circ$$

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

$$\alpha = 180 - 60$$

$$\alpha = 120^\circ$$

$$y + 45 + 5 = 180^\circ$$

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

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

$$y = 60^\circ$$

$$y + \alpha + a + x = 360^\circ$$

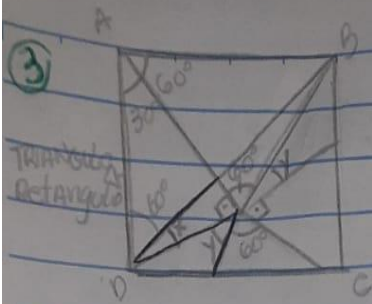
$$60^\circ + 120^\circ + 60^\circ + x = 360^\circ$$

$$240^\circ + x = 360^\circ$$

$$x = 360^\circ - 240^\circ$$

$$x = 120^\circ$$

(C)



Pela regra do "z", x e y
são congruentes, então se
 $y = 30^\circ$, $x = 30^\circ$

$$90^\circ + 90^\circ + 60^\circ + 60^\circ + 2y = 360^\circ$$

$$300^\circ + 2y = 360^\circ$$

$$2y = 360^\circ - 300$$

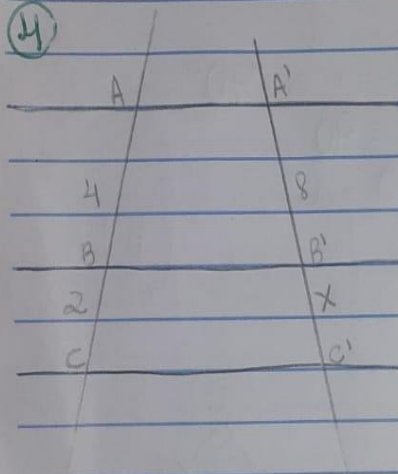
$$2y = 60^\circ$$

$$y = 60/2$$

$$y = 30$$

(E)

④



$$\frac{4}{2} = \frac{8}{x}$$

$$8 \cdot 2 = 4x$$

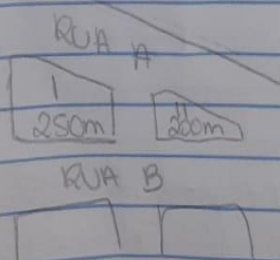
$$16 = 4x$$

$$x = 16/4$$

$$x = 4 \text{ m}$$

⑤ R: Afirmação falsa é a "E", porque todo losango possui dois lados paralelos, por isso é também um paralelogramo.

⑥



$$250 = 200$$

$$40 + x \quad x$$

$$200(40 + x) = 250x$$

$$8000 + 200x = 250x$$

$$250x - 200x = 8000$$

$$50x = 8000$$

$$x = 8000/5$$

(A)

$$x = 1600 \text{ m}$$