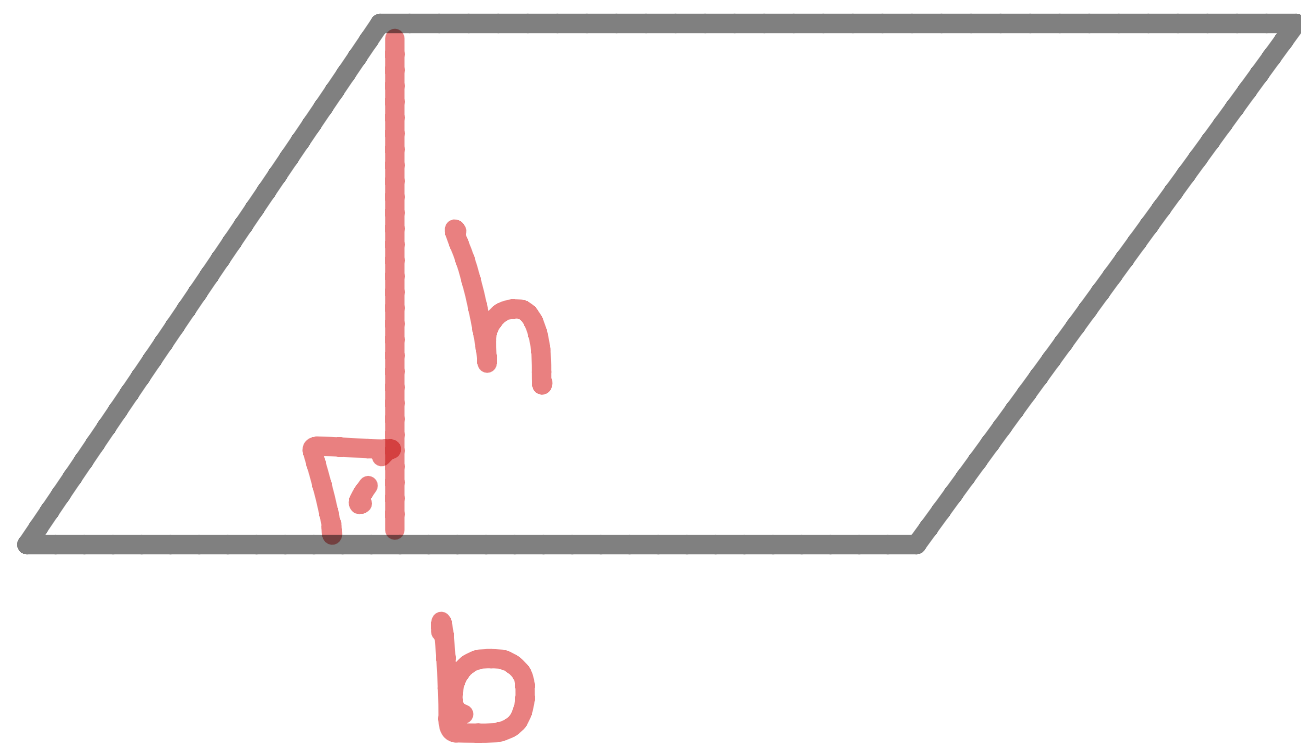


→ Anéis de polígonos

(IMPONANTÍSSIMO!) //

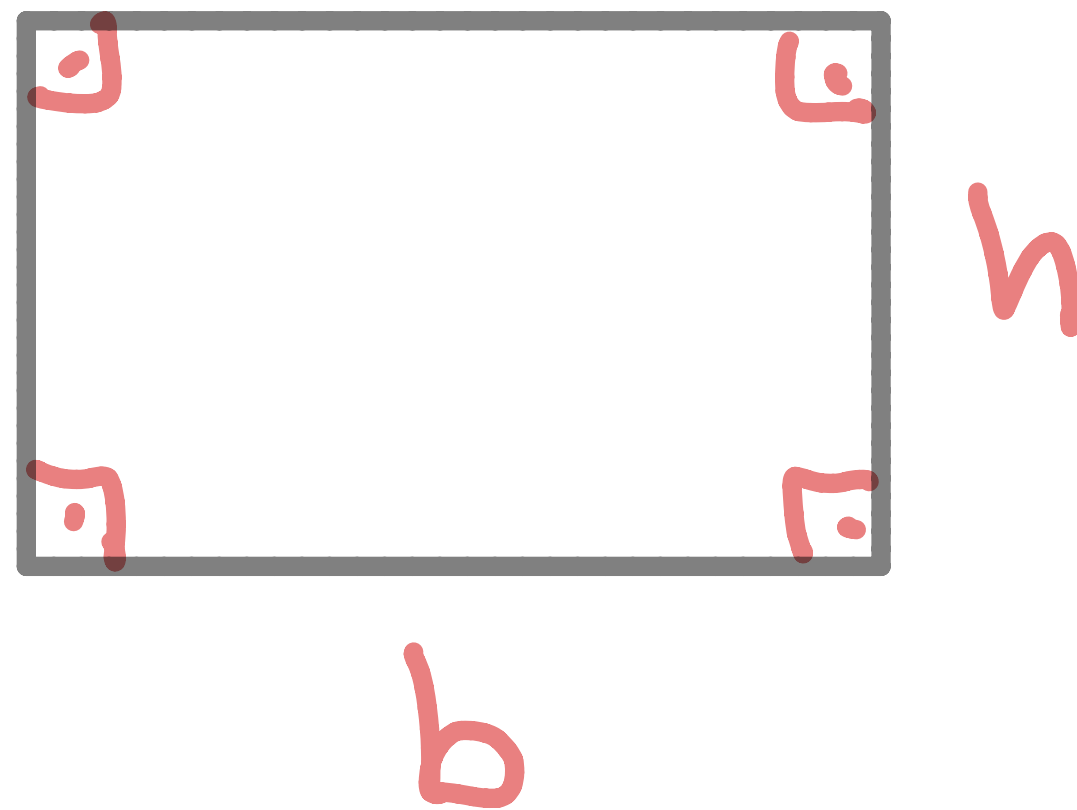
① Paralelogramo



$$A = b \cdot h$$

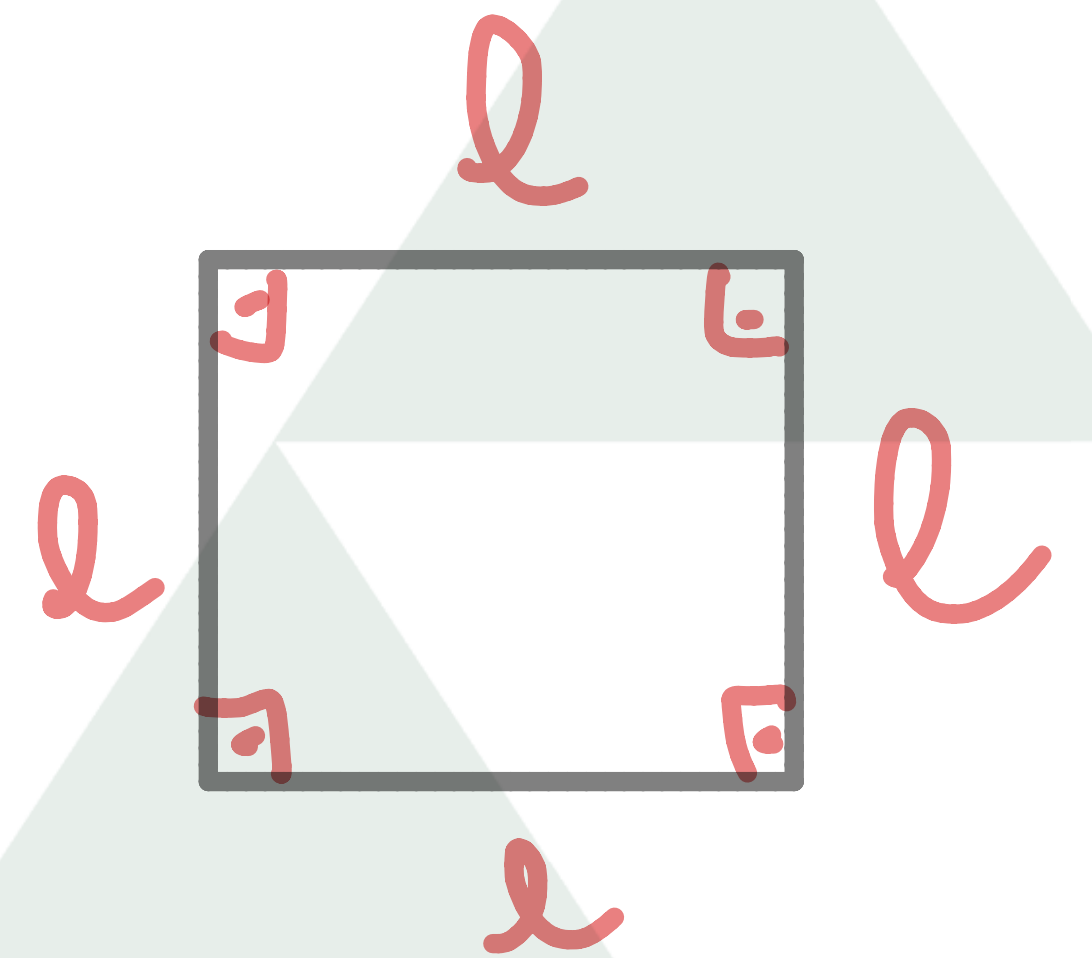


② Retângulo



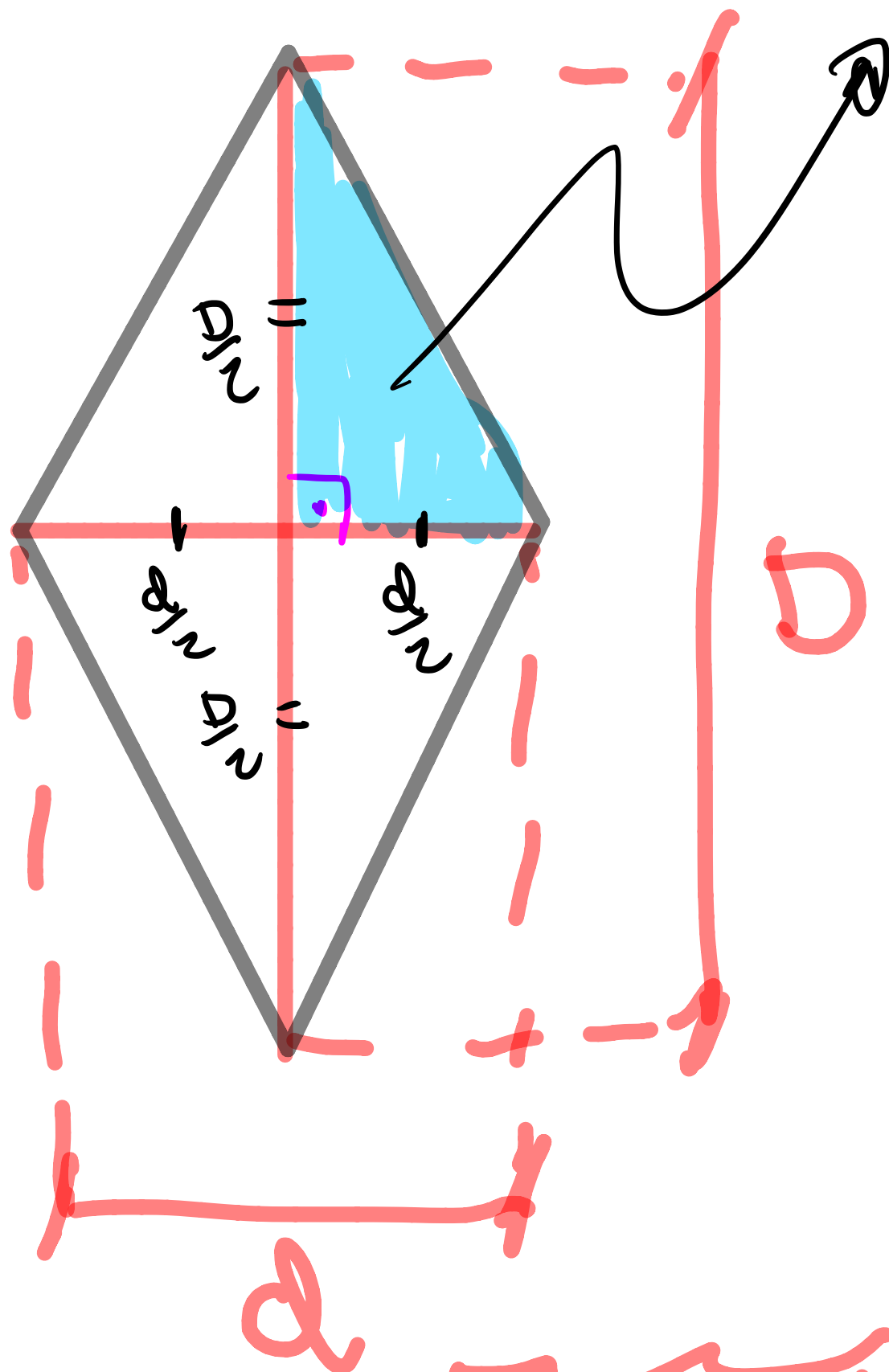
$$A = b \cdot h$$

③ Quadrado



$$A = l^2$$

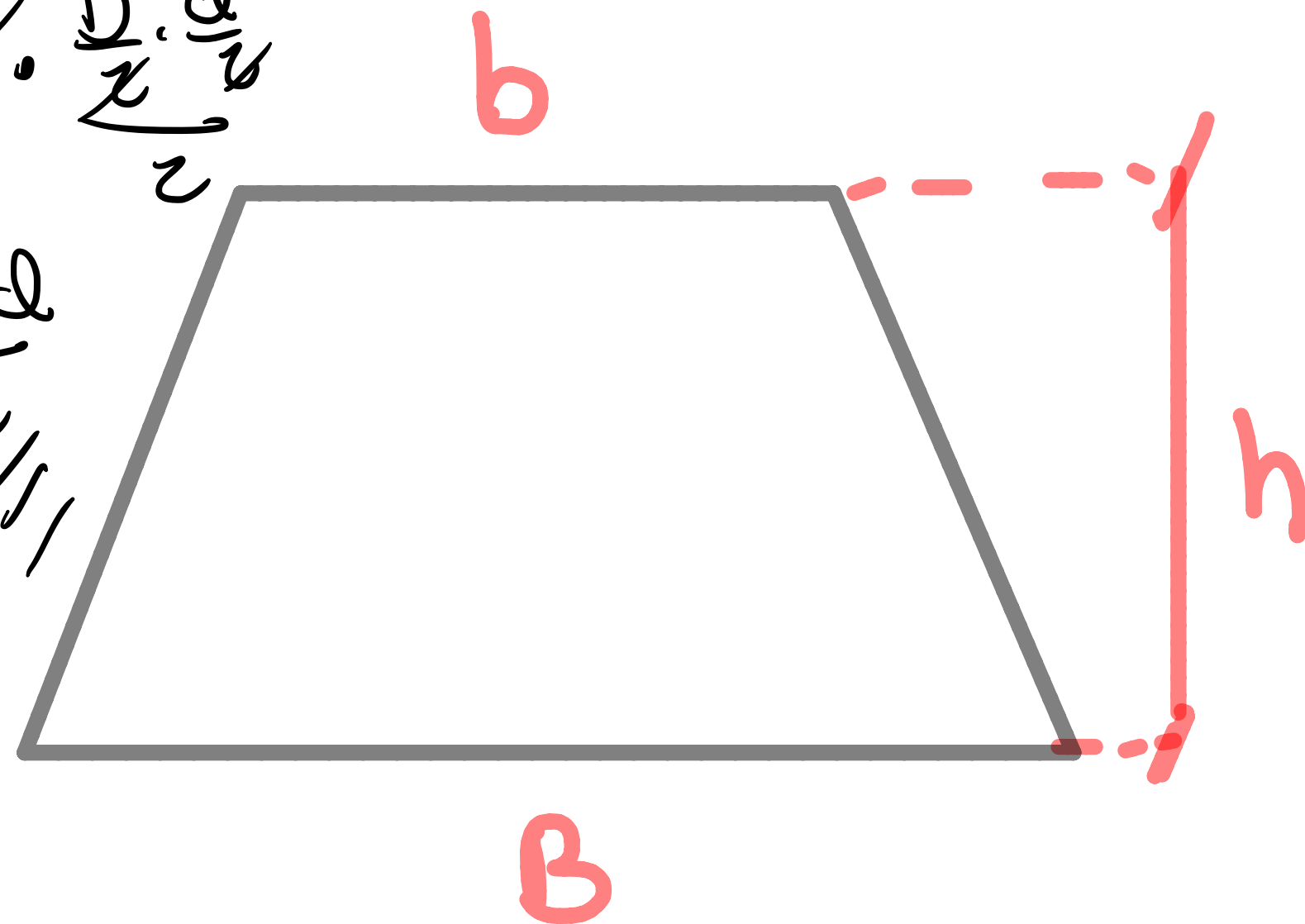
④ Losango



$$A = 4 \cdot \frac{\frac{D}{2} \cdot \frac{d}{2}}{2}$$
$$A = \frac{D \cdot d}{2}$$

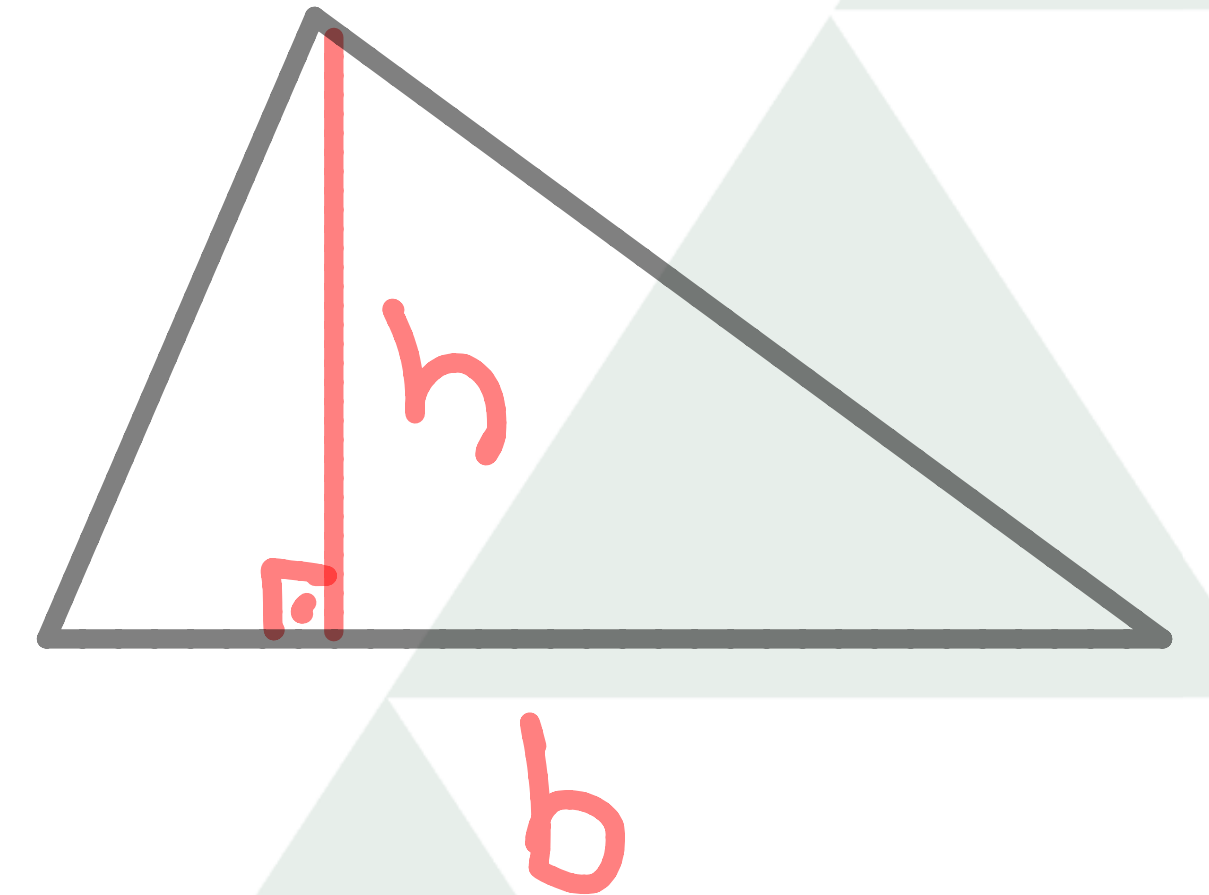
$$A = \frac{D \cdot d}{2}$$

⑤ Trapézio



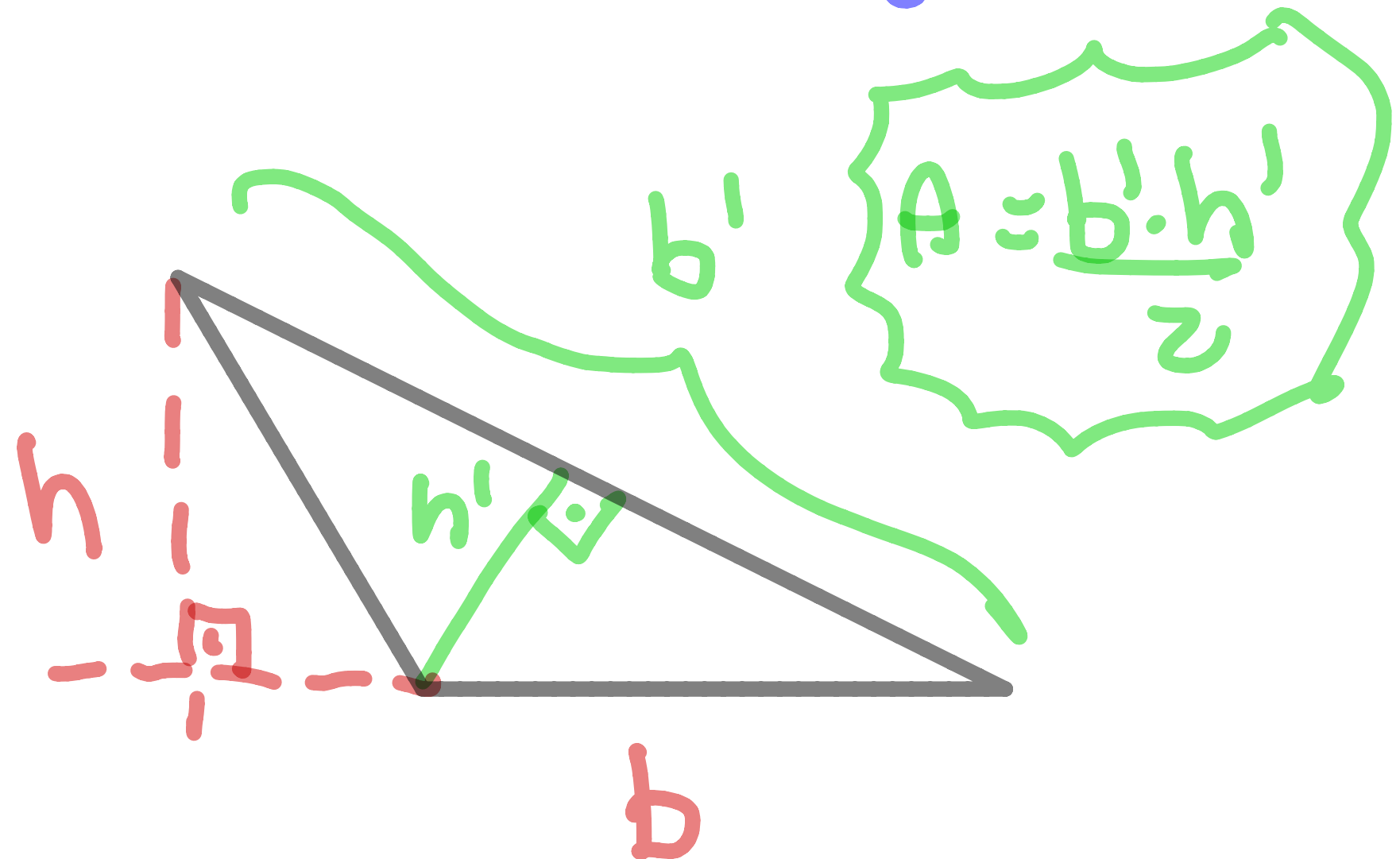
$$A = \frac{(b+B) \cdot h}{2}$$

⑥ Triângulo



$$A = \frac{b \cdot h}{2}$$

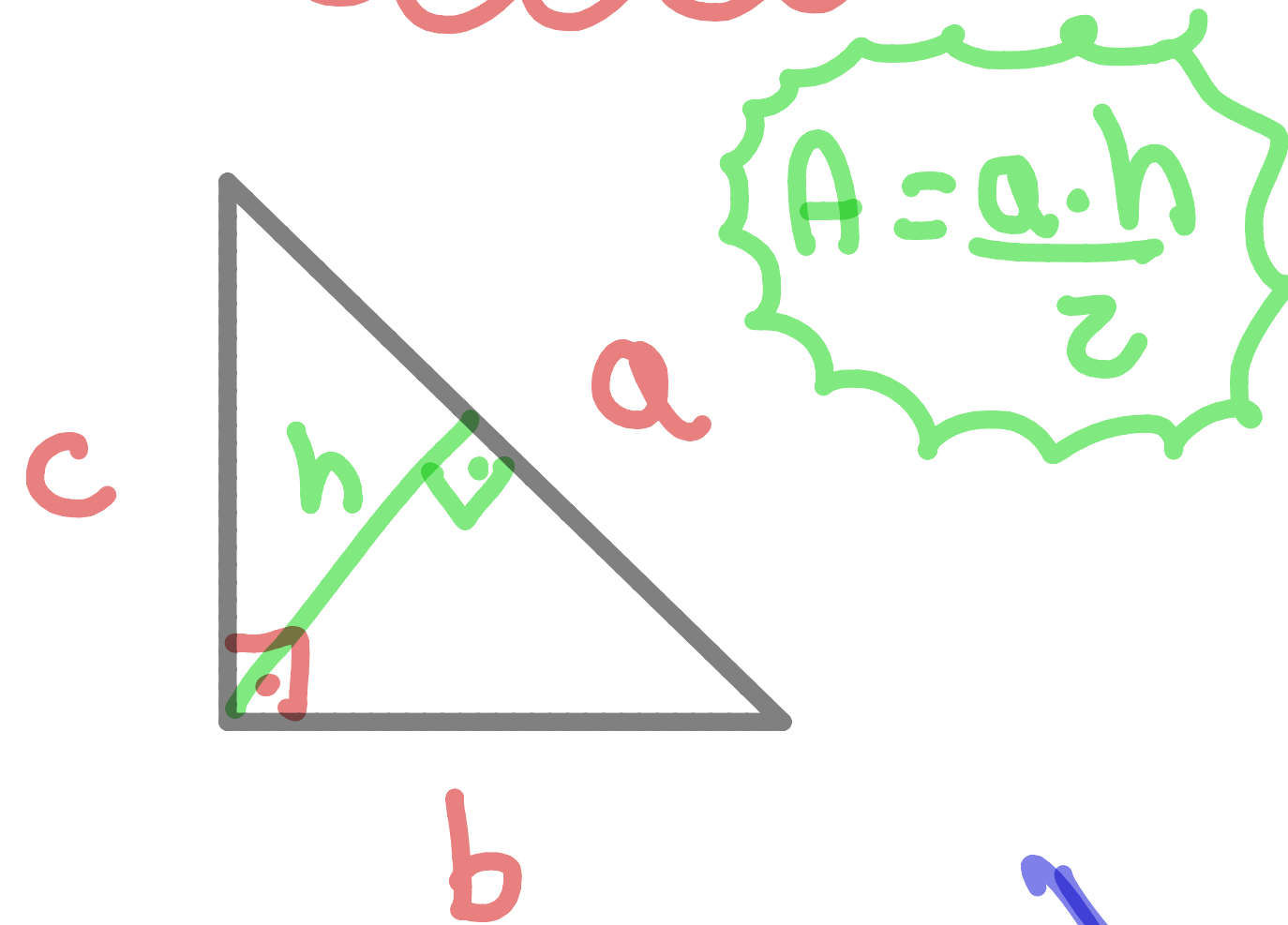
(6.1) Δ obtusângulo



$$A = \frac{b' \cdot h'}{2}$$

$$A = \frac{b \cdot h}{2}$$

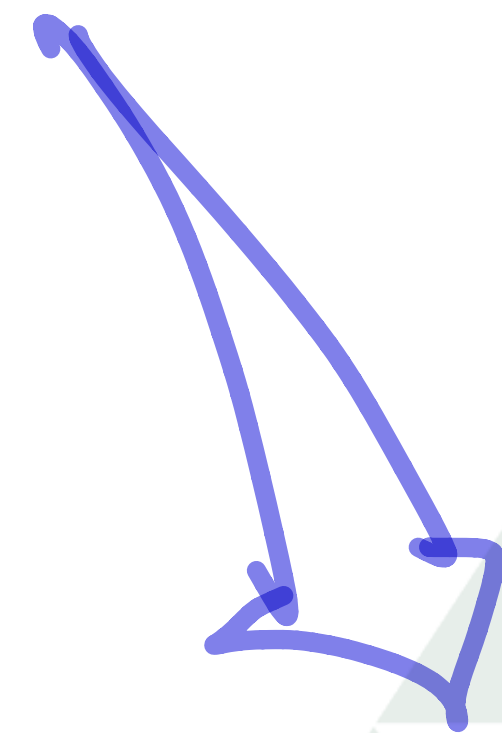
(6.2) Δ retângulo (Importantíssimo)



$$A = \frac{a \cdot h}{2}$$

$$A = \frac{b \cdot c}{2}$$

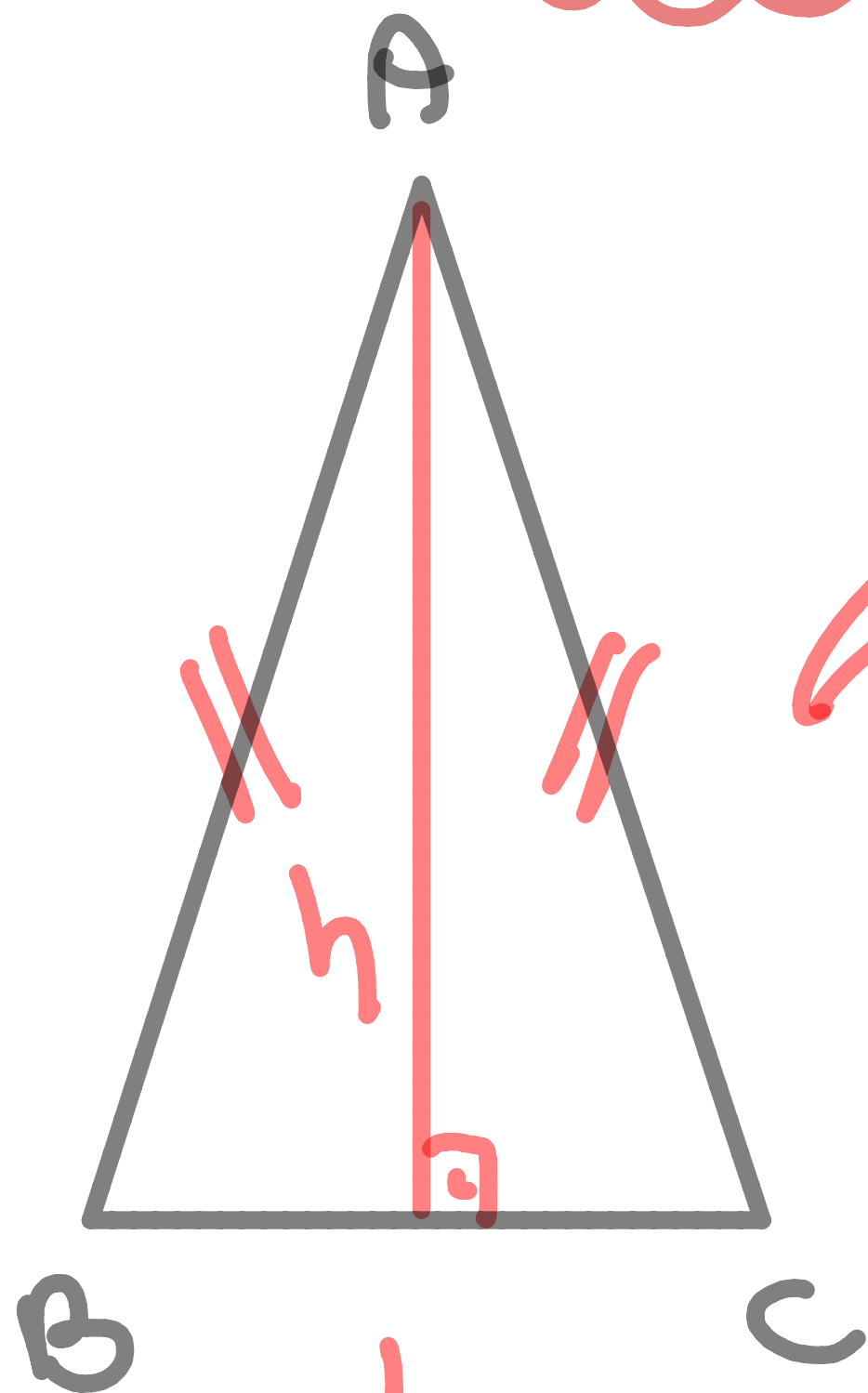
$$A = \frac{\text{CATETO} \times \text{CATETO}}{2}$$



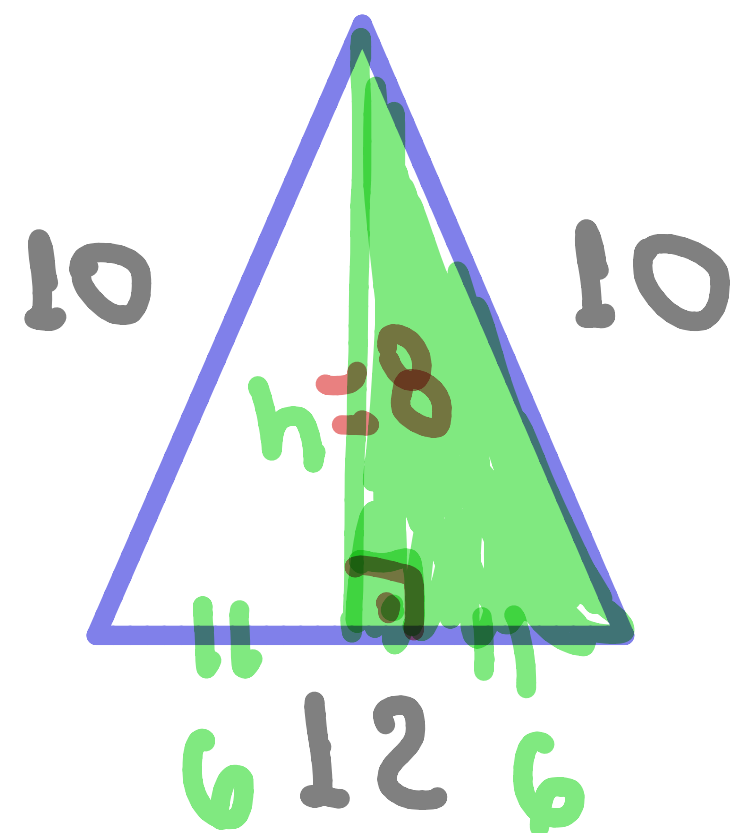
Legal!!!

$$\frac{a \cdot h}{2} = \frac{b \cdot c}{2}$$
$$a \cdot h = b \cdot c$$

6.3 Δ isósceles



Ex: $A_{\Delta} = ?$

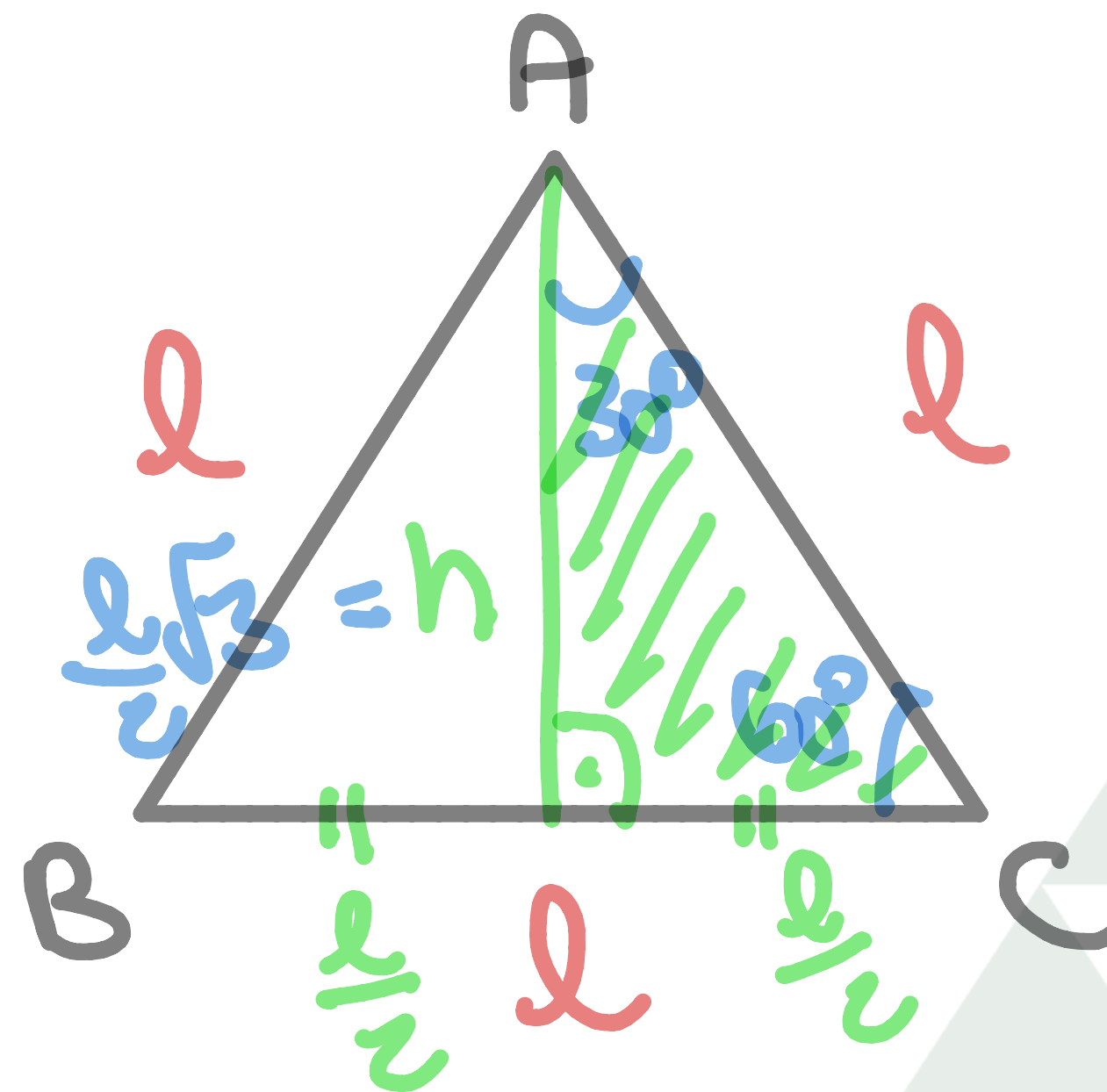


$$A_{\Delta} = \frac{12 \cdot 8}{2} = 48$$

$A_{\Delta} = 48 \text{ m}^2$

$A = \frac{b \cdot h}{2}$

6.4 Δ equilátero (importante!!!)



$h_{\Delta} = \frac{l\sqrt{3}}{2}$

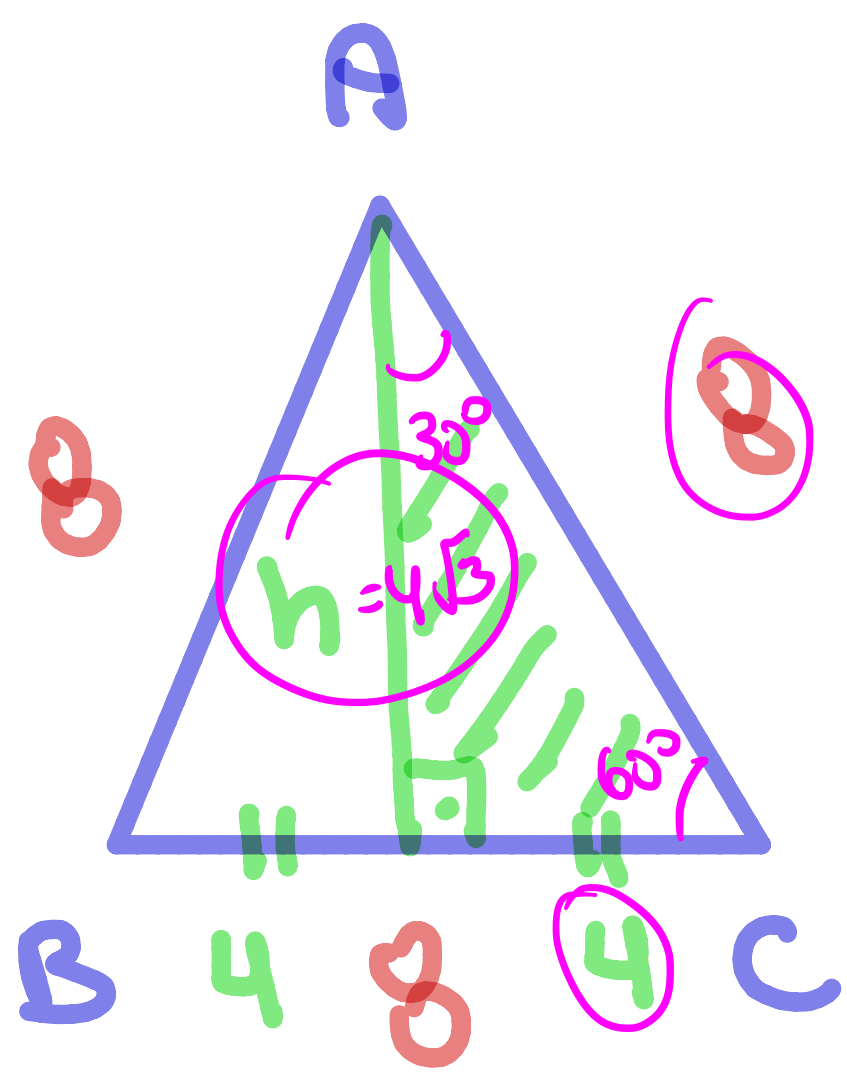
$$A = \frac{l^2 \sqrt{3}}{4}$$

Demonst: $A_{\Delta} = \frac{b \cdot h}{2}$

$$A_{\Delta} = \frac{l \cdot \frac{l\sqrt{3}}{2}}{2}$$

$$A_{\Delta} = \frac{l^2 \sqrt{3}}{4}$$

Ex: $A_D = ?$



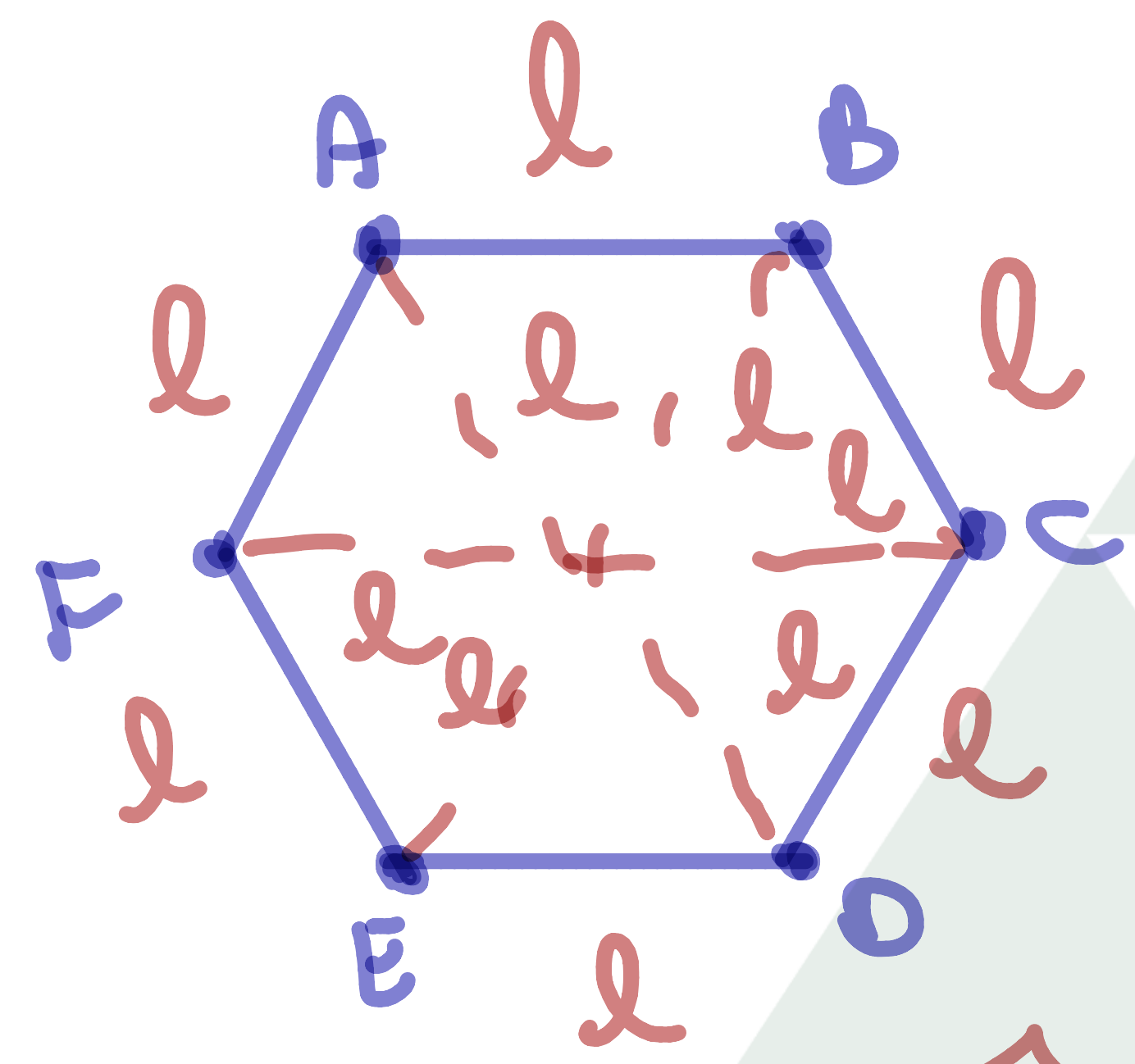
$$A_D = \frac{l^2 \sqrt{3}}{4}$$

$$A_D = \frac{8^2 \sqrt{3}}{4}$$

$$A_D = \frac{16 \cdot 4 \sqrt{3}}{4}$$

$$A_D = 16\sqrt{3} \text{ u.a.}$$

OBS: Hexágono Regular

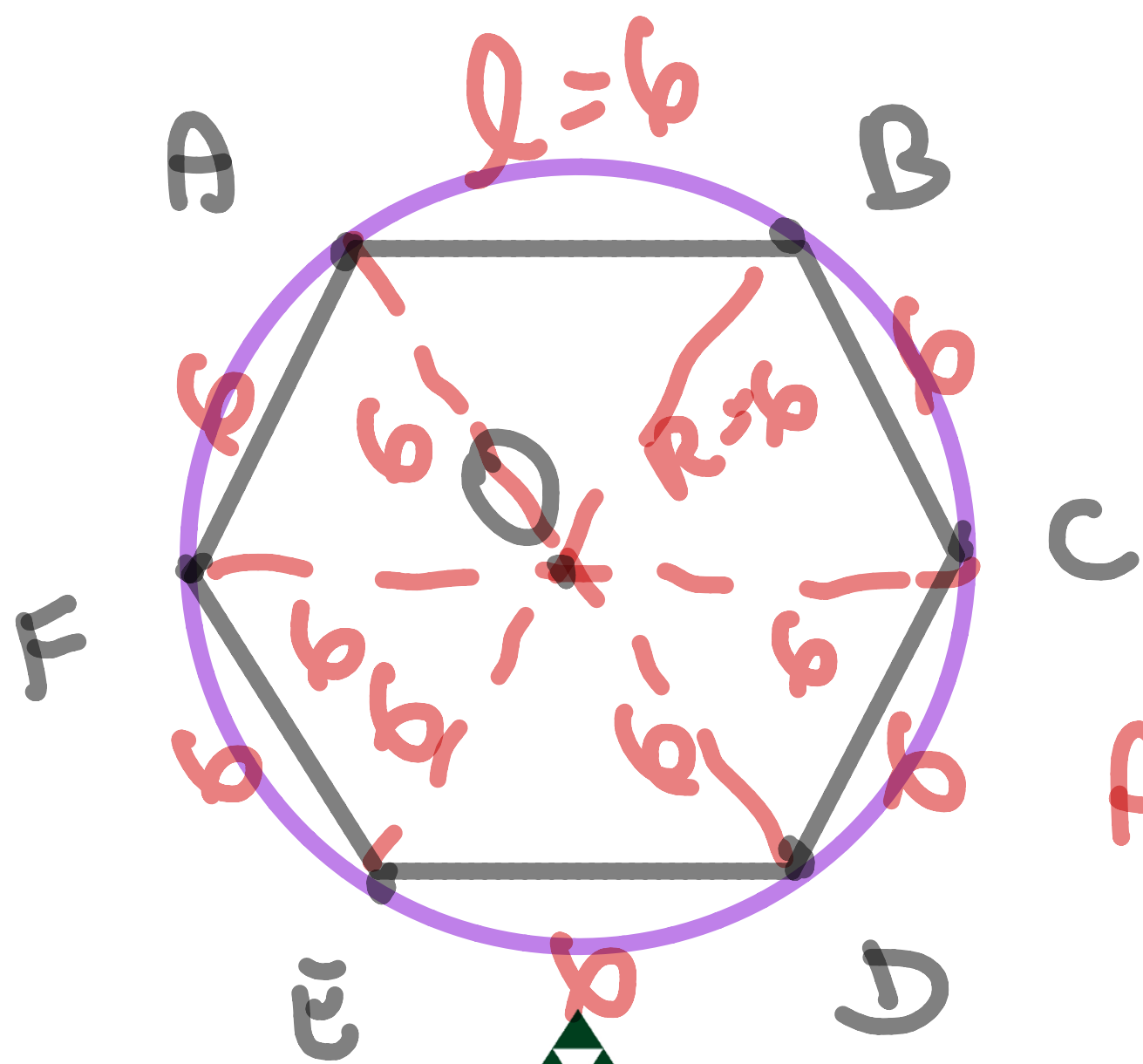


$$A_{\text{hex. reg.}} = 6 \cdot \frac{l^2 \sqrt{3}}{4}$$

$$A_D = \frac{b \cdot h}{2}$$

$$A_D = \frac{8 \cdot 4\sqrt{3}}{2} = 16\sqrt{3}$$

Exemplo 1) Determine a área de um HEXÁGONO REGULAR inscrito em um círculo de perímetro igual a 12π cm.



$$2p = 12\pi$$

$$2\pi R = 12\pi$$

$$R = 6 \text{ cm} //$$

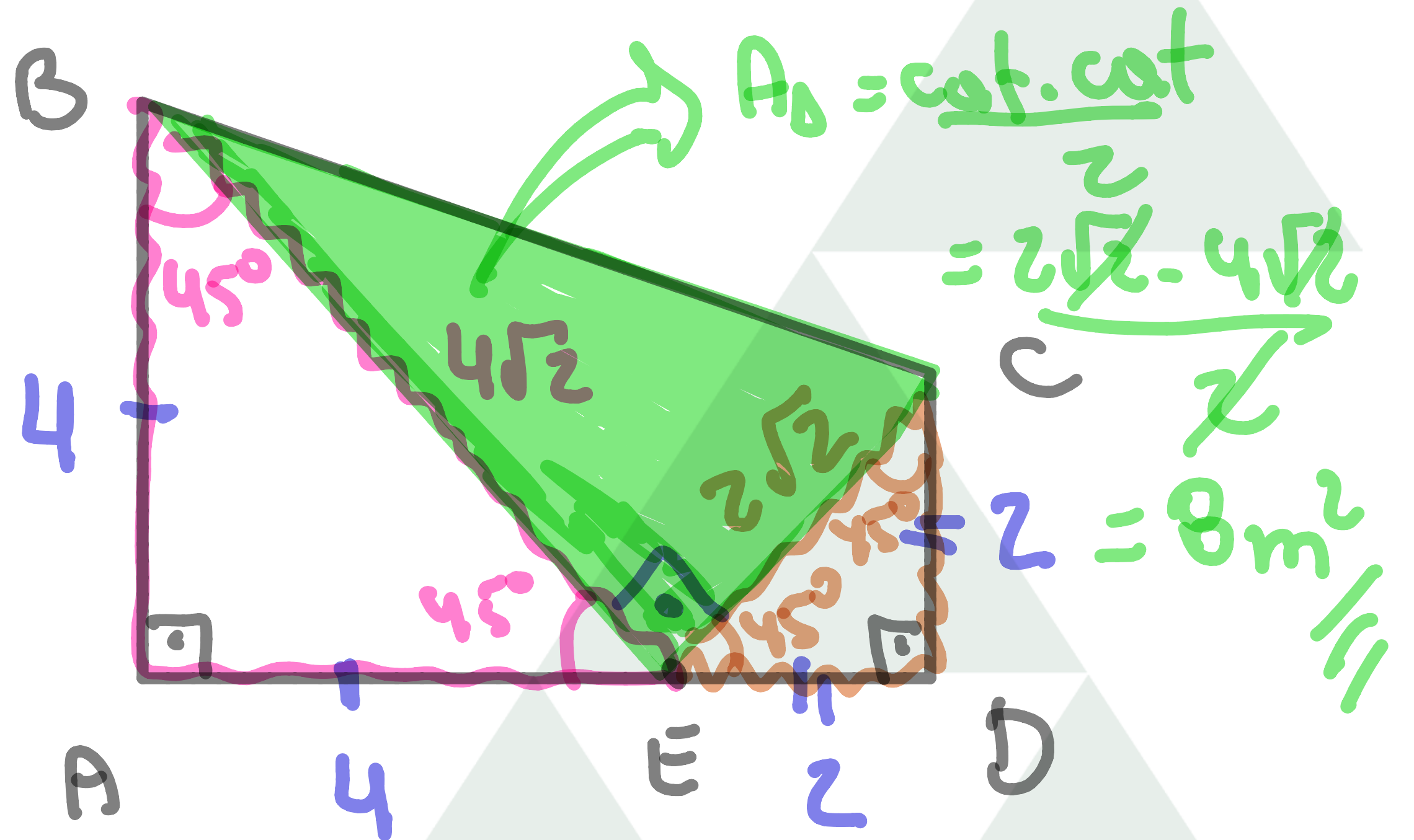
$$A_{\text{hex. reg}} = 6 \cdot \frac{l^2 \sqrt{3}}{4}$$

$$= 6 \cdot \frac{6^2 \sqrt{3}}{4}$$

$$= 54\sqrt{3} \text{ cm}^2 //$$

Exemplo 2
(AUC)

- $A_{\Delta BCE} = ?$
- $\overline{AB} = 2\overline{CD} = 4\text{m}$
- $\overline{AB} = \overline{AE}$
- $\overline{BC} = \overline{DE}$



Exemplo 2

(AUC)

• $A_{ABCE} = ?$

• $\overline{AB} = 2\overline{CD} = 4\text{m}$

• $\overline{AB} = \overline{AE}$

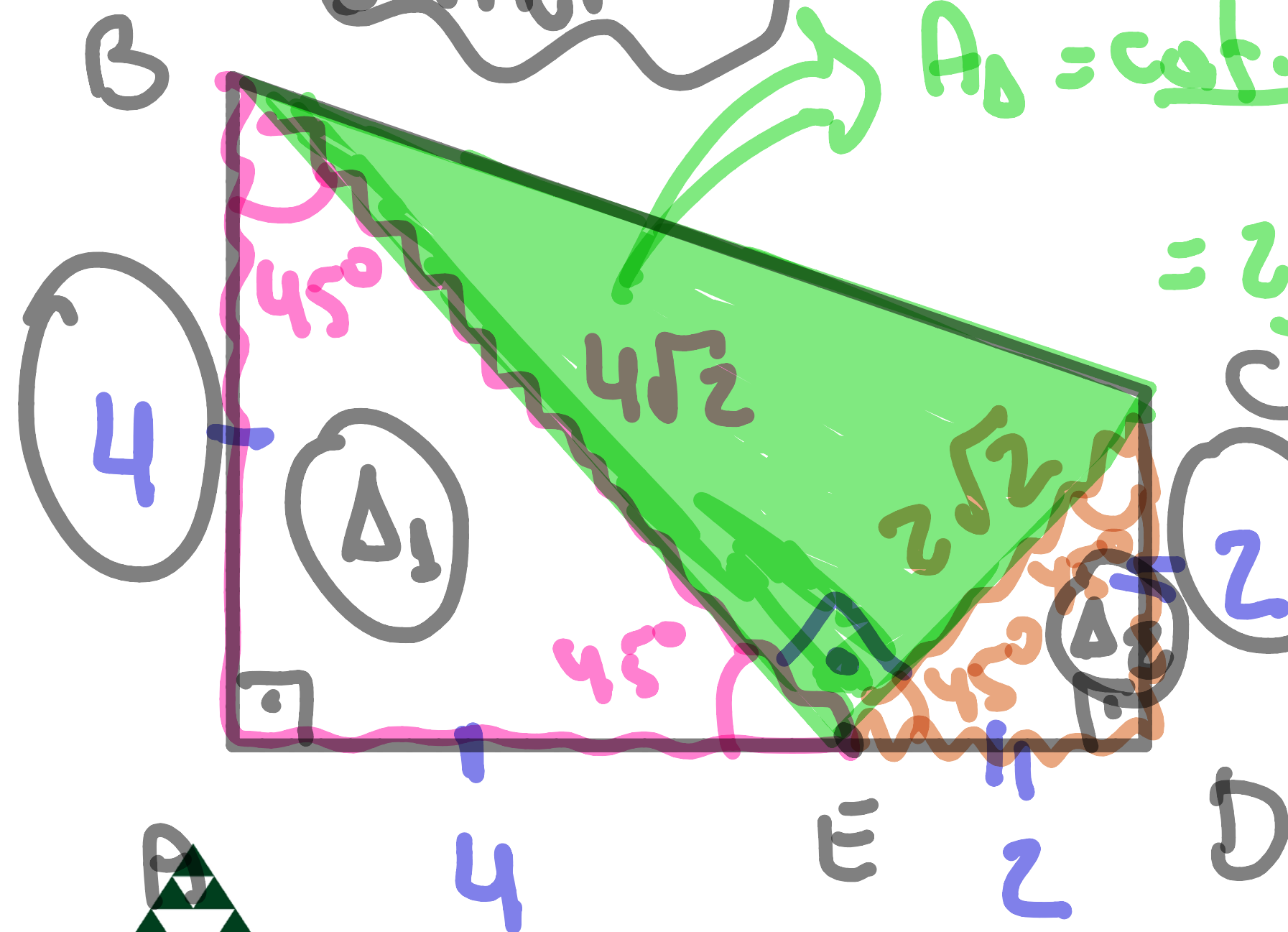
• $\overline{BC} = \overline{DE}$

1º método

$A_D = \frac{\text{cat} \cdot \text{cat}}{2}$

$= \frac{2\sqrt{2} \cdot 4\sqrt{2}}{2}$

$= 8\text{m}^2$



ou 2º método!

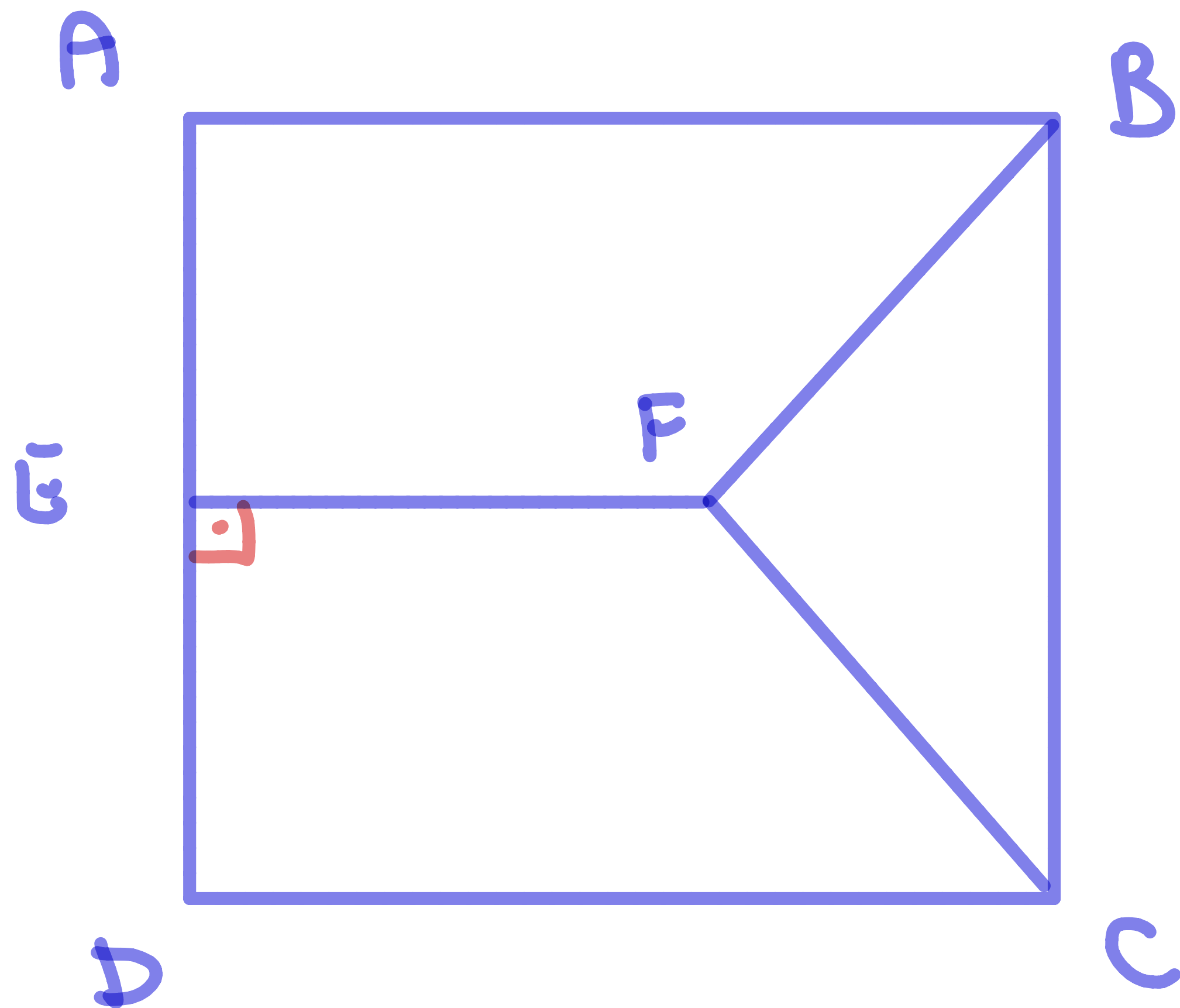
$A_D = A_{\text{mapeção}} - A_{D_1} - A_{D_2}$

$A_D = \frac{(4+2) \cdot 6}{2} - \frac{4 \cdot 4}{2} - \frac{2 \cdot 2}{2}$

$A_D = 18 - 8 - 2$

$A_D = 8\text{m}^2$

Exemplo 3 (UFMG antiga)



- $l_{\square} = 1 \text{ cm}$

- $AE = \frac{1}{2} \text{ cm}$

- $EF = FB = FC$

- $A \triangle BCF = ?$