

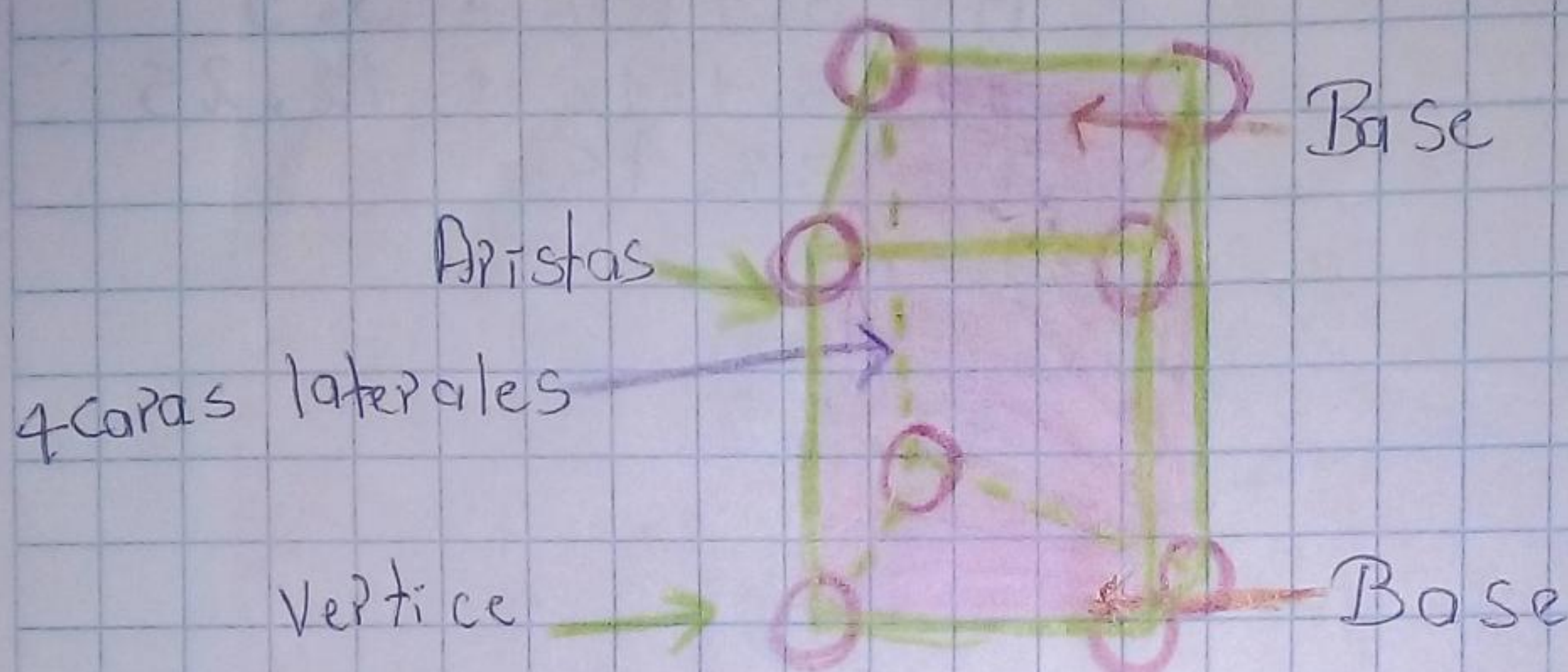
Volumen

19 + 10 + 21

Espacio ocupado por un cuerpo.

¿Qué son los prismas?

PRISMAS Y PIRÁMIDES



Prismas:

Un prisma por su número de lados puede ser.

PRISMA
TRIANGULAR



PRISMA
CUADRANGULAR



PRISMA
PENTAGONAL



PRISMA
HEXAGONAL



PRISMA
HEPTAGONAL

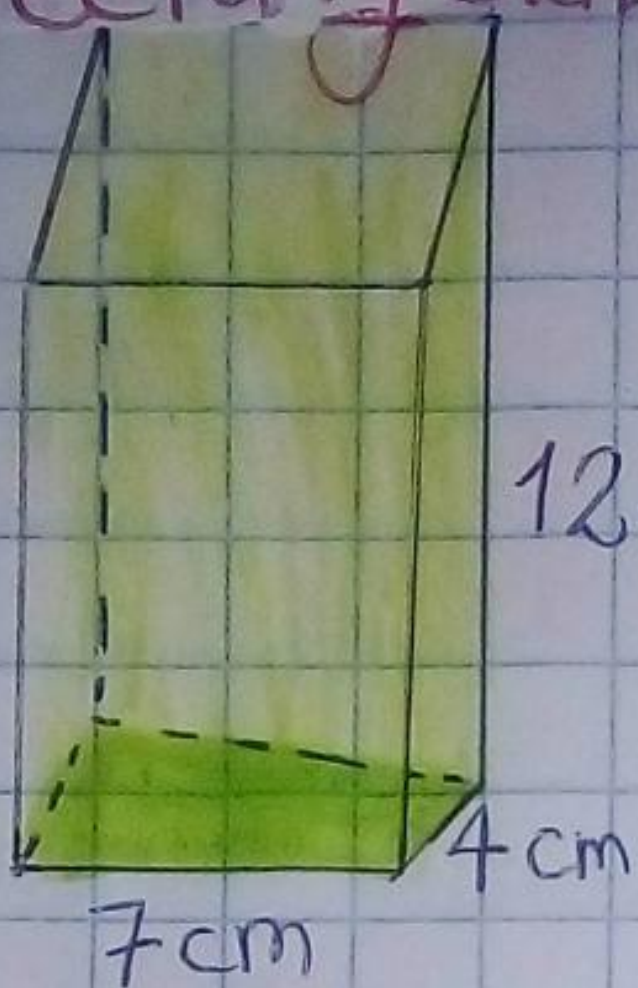


PRISMA
OCTOGONAL



Formulas

Formula del prisma Rectangular



$$V = Ab \times hc$$

$$Ab = \text{lado} \times \text{lado}$$

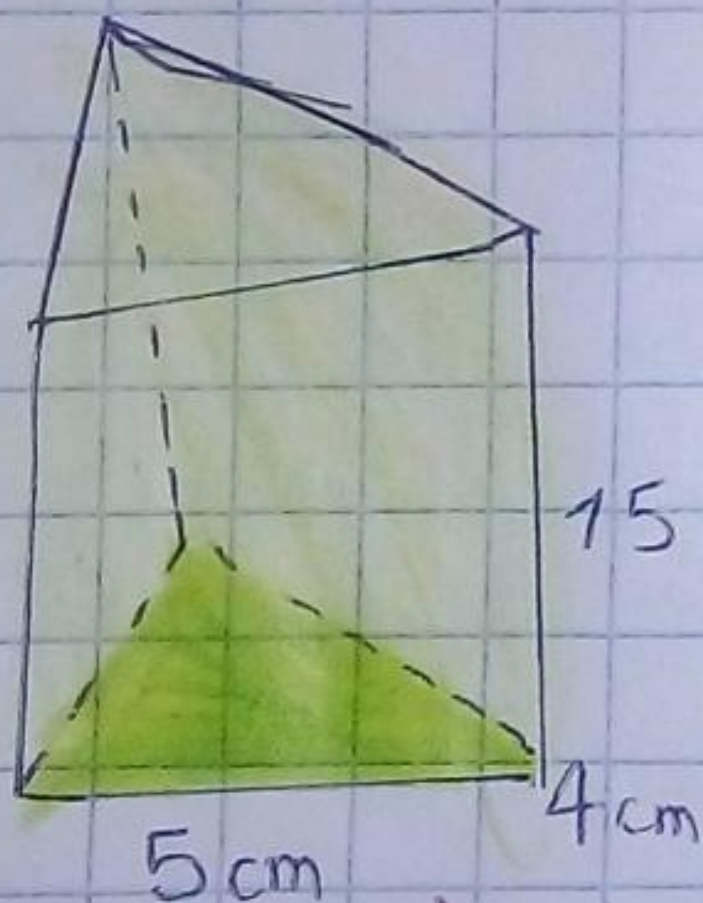
$$Ab = 7 \times 4$$

$$Ab = 28 \text{ cm}^2$$

$$V = 28 \times 12$$

$$V = 336 \text{ cm}^3$$

Formula del prisma Triangular



$$V = Ab \times hc$$

$$Ab = \frac{b \times h}{2}$$

$$Ab = \frac{5 \times 4}{2}$$

$$Ab = 10 \text{ cm}^2$$

$$V = 10 \times 15$$

$$V = 150 \text{ cm}^3$$

Formula del prisma Pentagonal



$$V = Ab \times hc$$

$$Ab = \frac{P \times a}{2}$$

$$Ab = \frac{25 \times 4.3}{2}$$

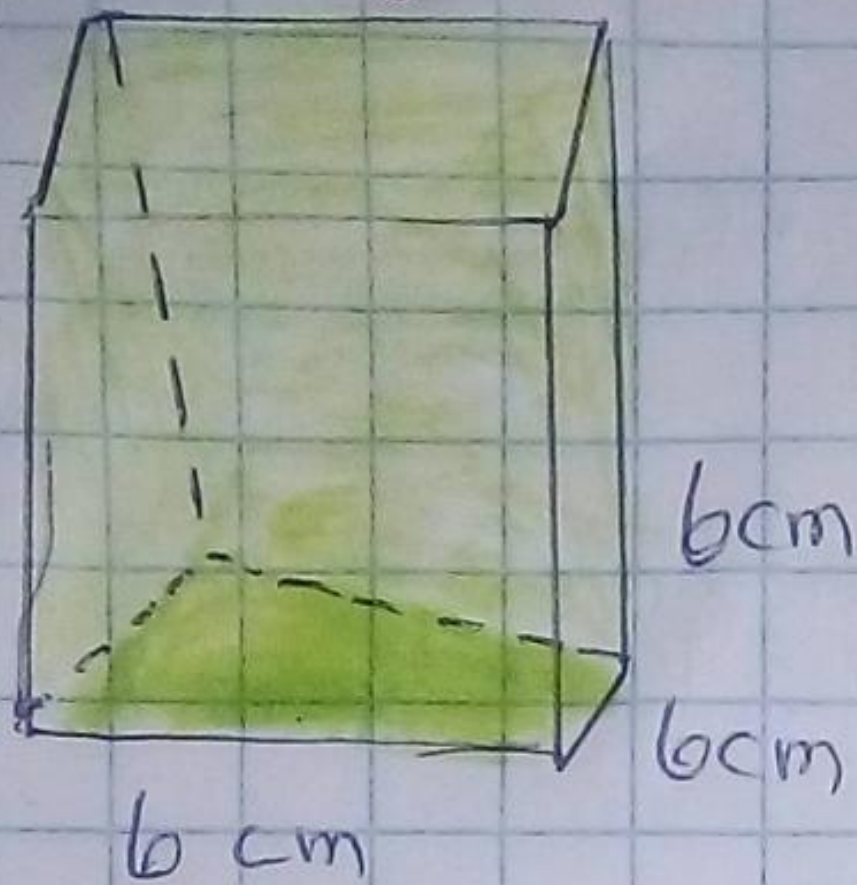
$$Ab = 53.7 \text{ cm}^2$$

$$V = 53.7 \times 10$$

$$V = 537 \text{ cm}^3$$



Formula del prisma Cuadrangular



$$V = A_b \times h_c$$

$$A_b = L \times L$$

$$A_b = b \times b$$

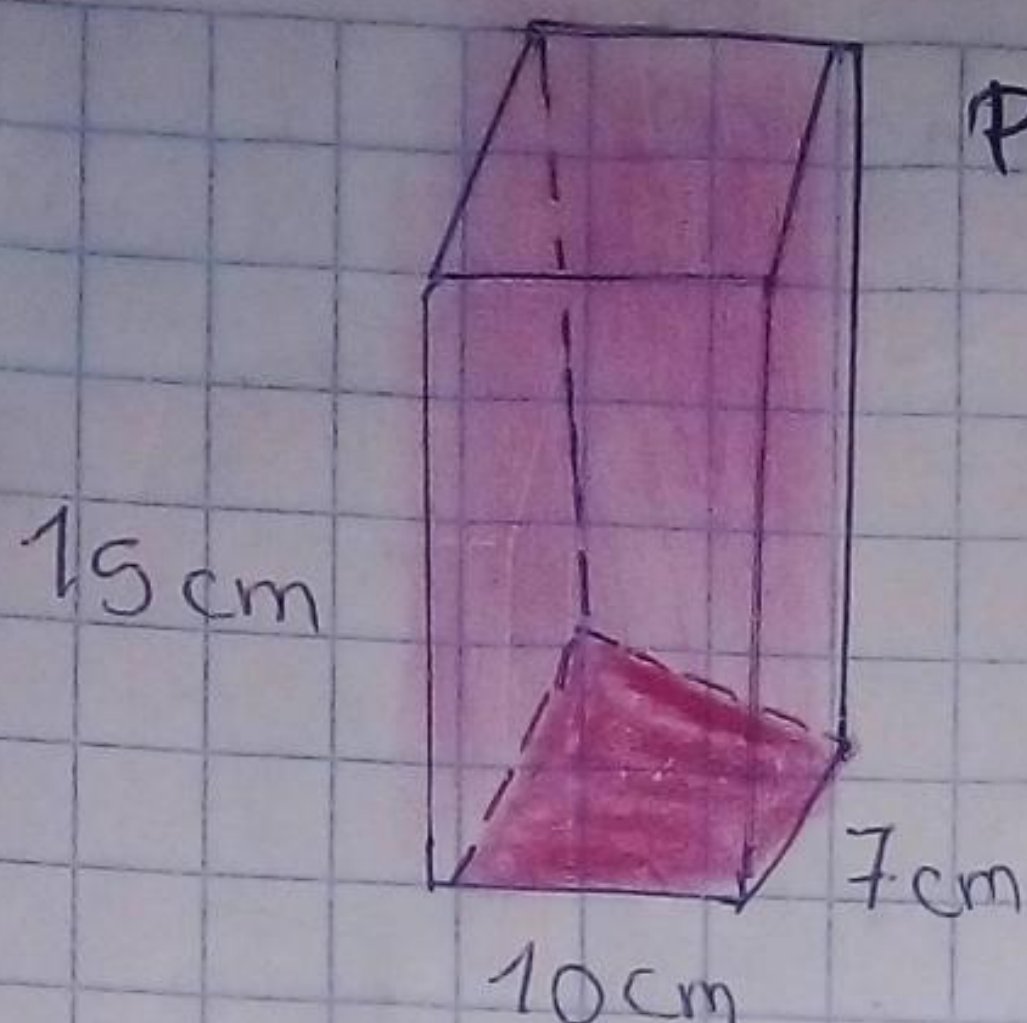
$$A_b = 36 \text{ cm}^2$$

$$V = 36 \times b$$

$$V = 216 \text{ cm}^3$$

Ejercicio de clase

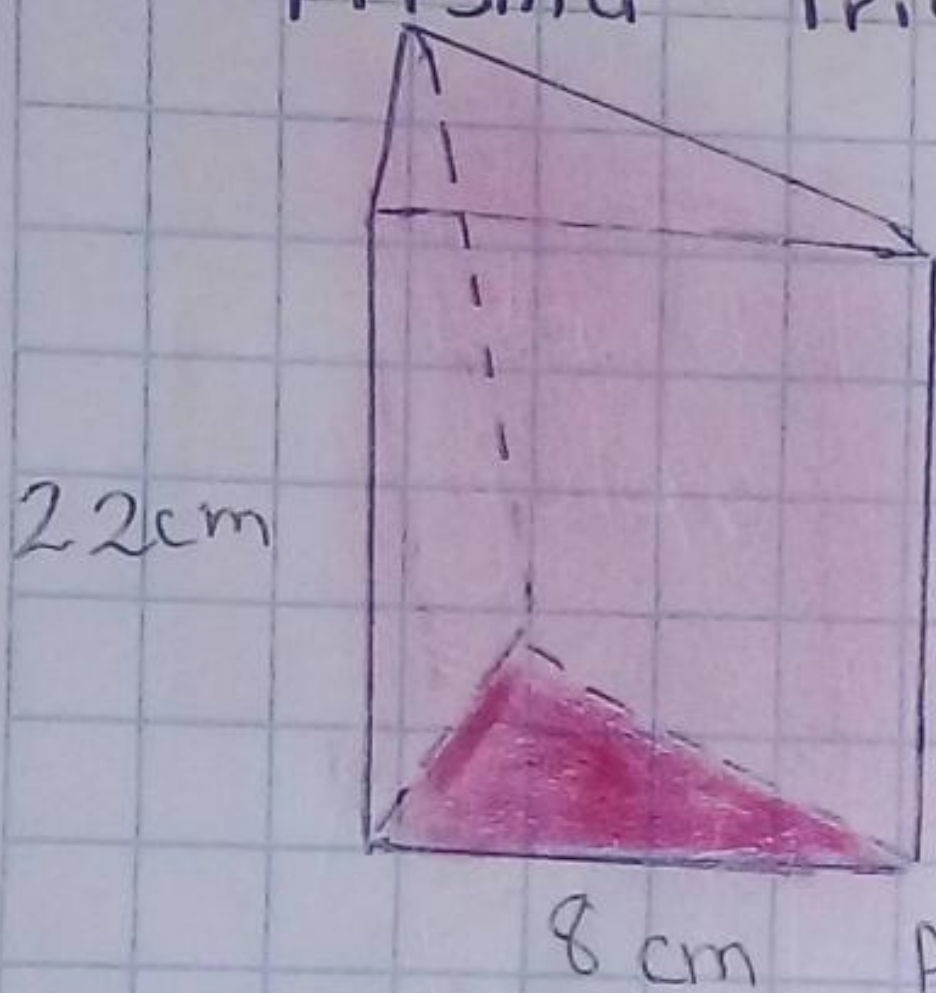
Salomé Monzón / 4° Bilingüe



Prisma Rectangular

$$\begin{aligned} Ab &= 10 \times 7 \\ Ab &= 70 \text{ cm}^2 \\ V &= 70 \times 15 \\ V &= 1,050 \text{ cm}^3 \end{aligned}$$

Prisma Triangular

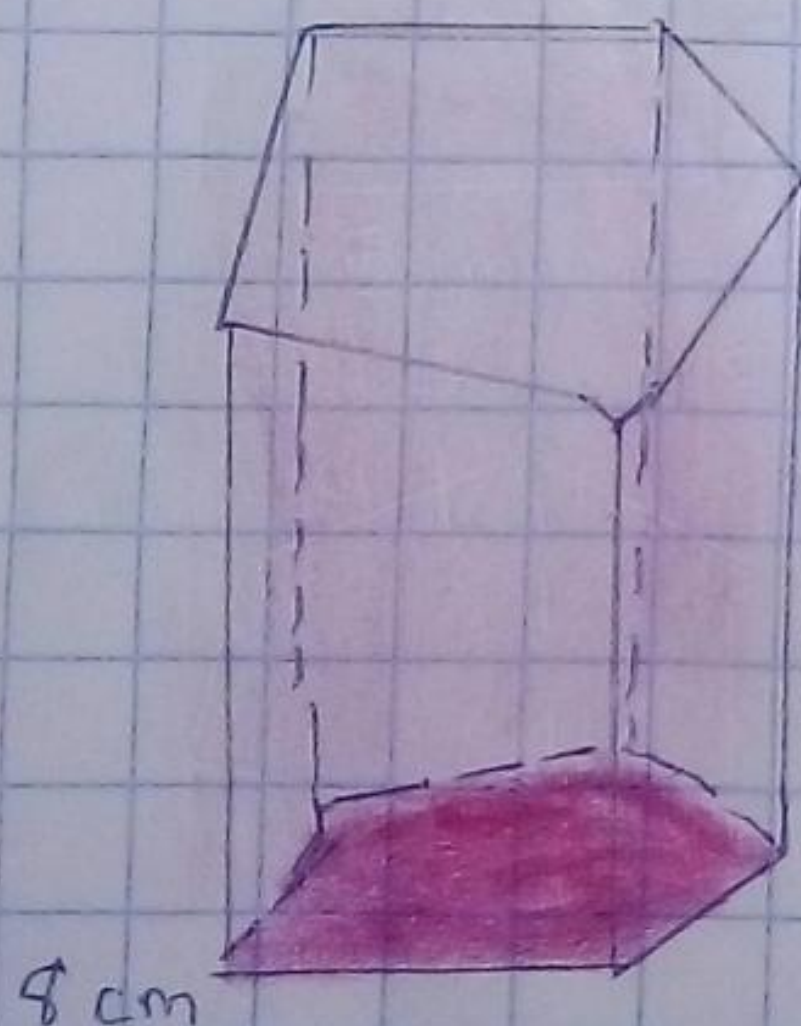


$$Ab = \frac{8 \times 5}{2}$$

$$\begin{aligned} Ab &= 20 \text{ cm}^2 \\ V &= 20 \times 22 \\ V &= 440 \text{ cm}^3 \end{aligned}$$

8 cm Altura: 5 cm

Prisma Pentagonal



$$Ab = \frac{40 \times 7}{2}$$

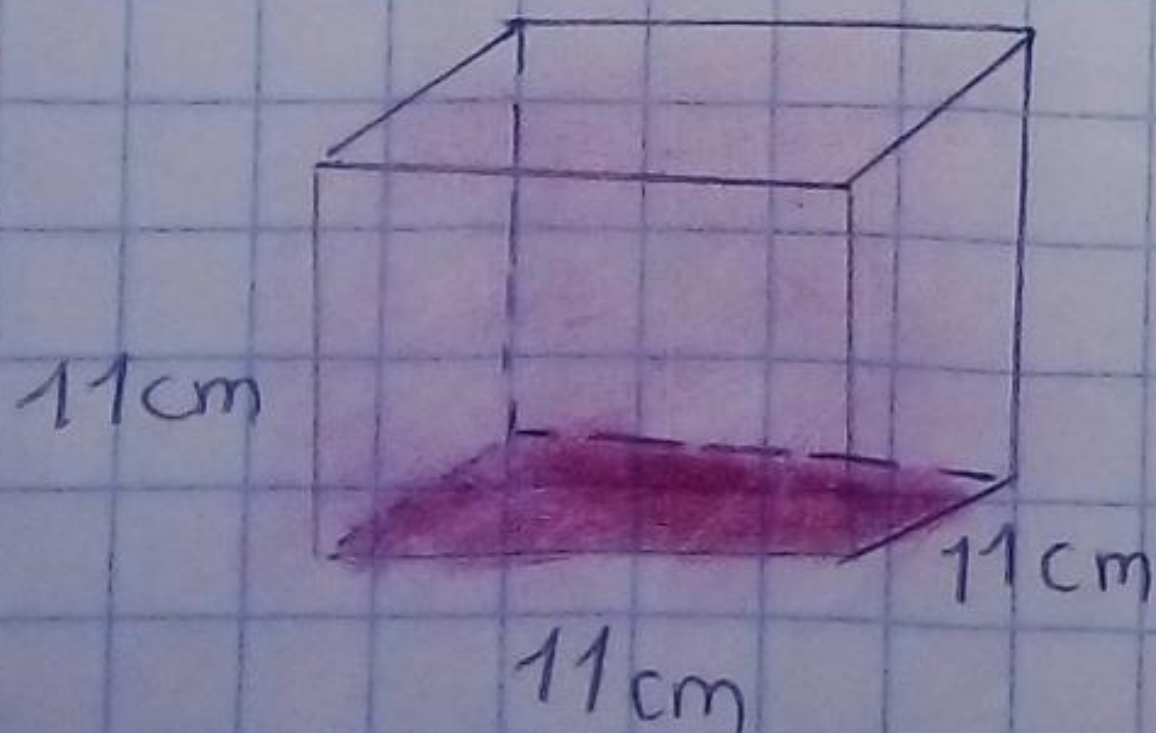
$$\begin{aligned} Ab &= 140 \text{ cm}^2 \\ V &= 140 \times 13 \\ V &= 1,820 \text{ cm}^3 \end{aligned}$$

13 cm

Apotema: 7 cm

8 cm

Prisma Cuadrangular

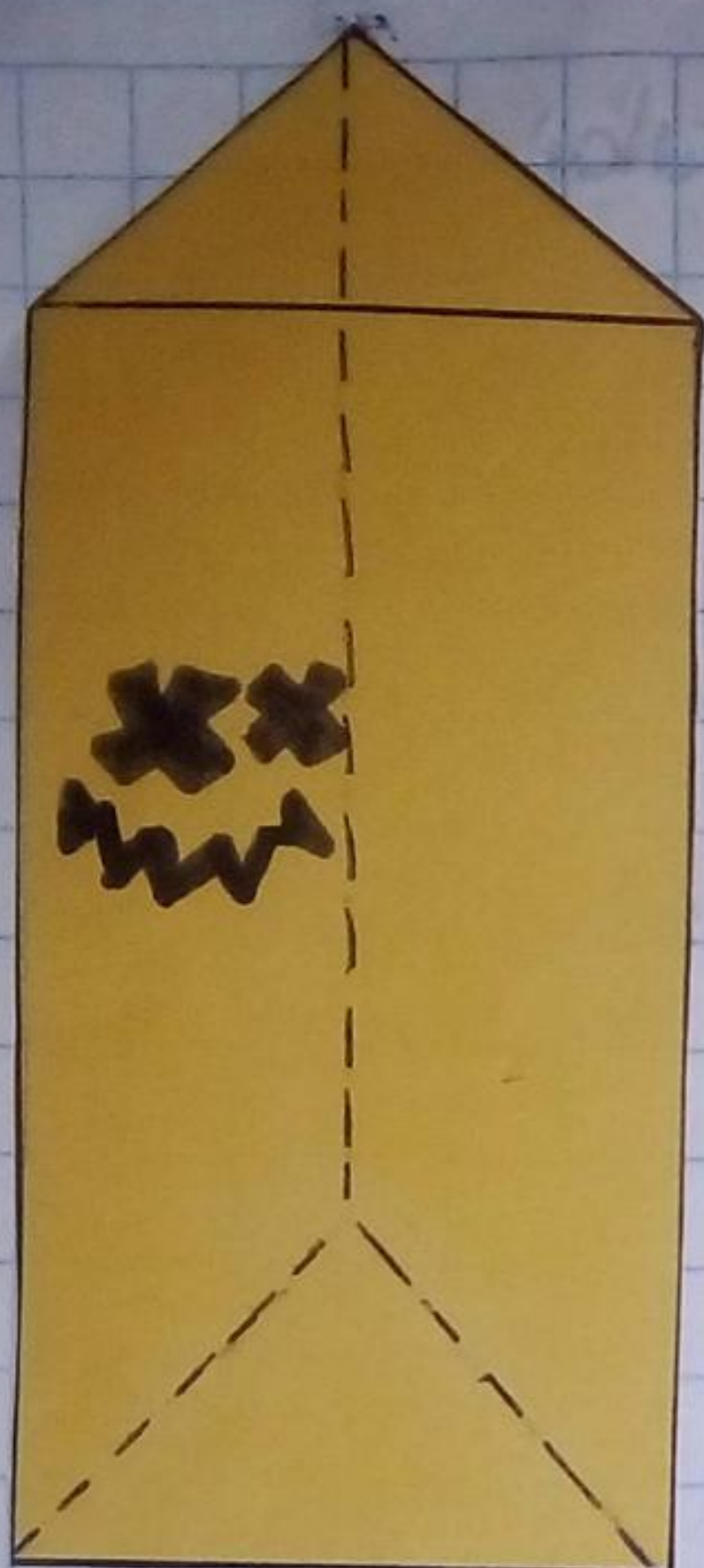


$$\begin{aligned} Ab &= 11 \times 11 \\ Ab &= 121 \text{ cm}^2 \\ V &= 121 \times 11 \\ V &= 1,331 \text{ cm}^3 \end{aligned}$$

11 cm

11 cm

11 cm



b = 4 cm

h = 3 cm

Prisma triangular

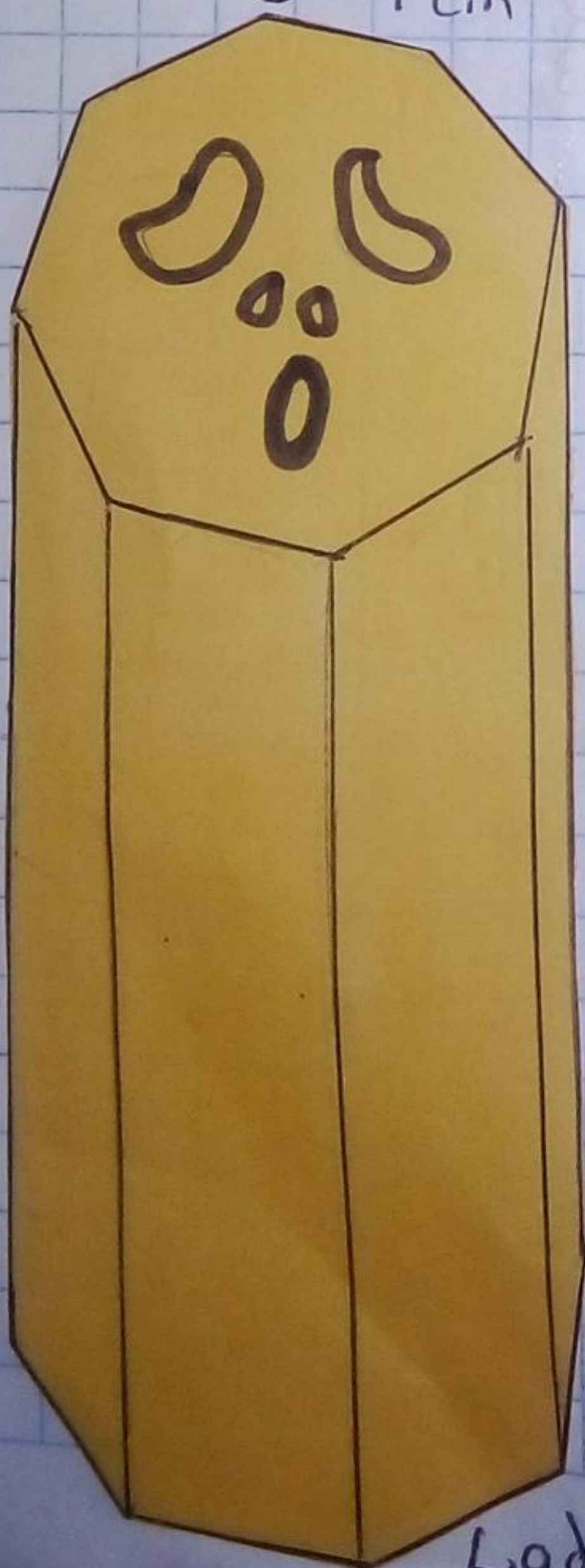
$$Ab = \frac{4 \times 3}{2}$$

$$Ab = 6 \text{ cm}^2$$

$$V = 6 \times 8$$

$$V = 48 \text{ cm}^3$$

hc = 8 cm



Apotema
5 cm

Lado = 2 cm

Prisma Octogonal

$$Ab = \frac{16 \times 5}{2}$$

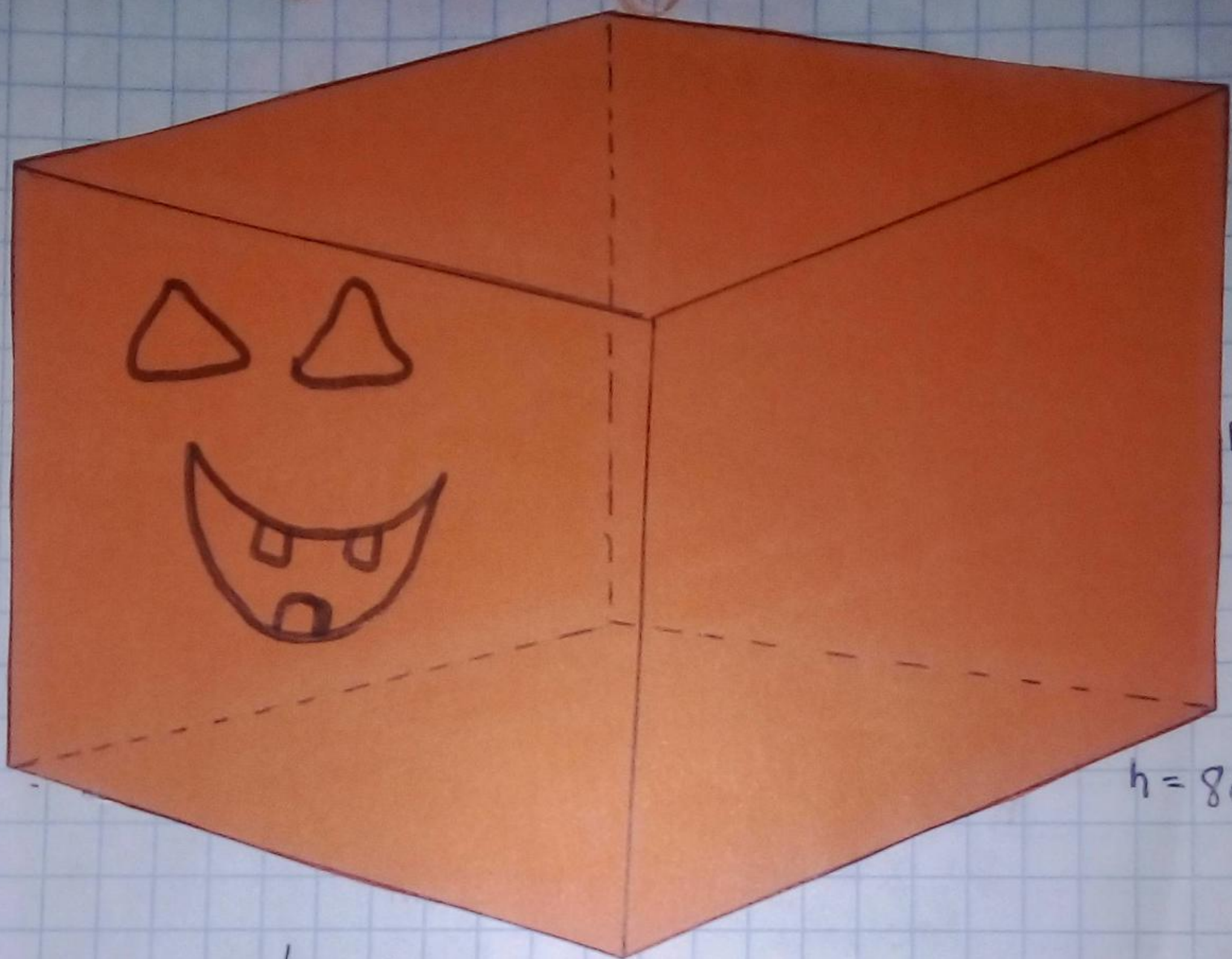
$$Ab = 40 \text{ cm}^2$$

$$V = 40 \times 9$$

$$V = 360 \text{ cm}^3$$

hc = 9 cm

Prisma Cuadrangular



$$b = 8 \text{ cm}$$

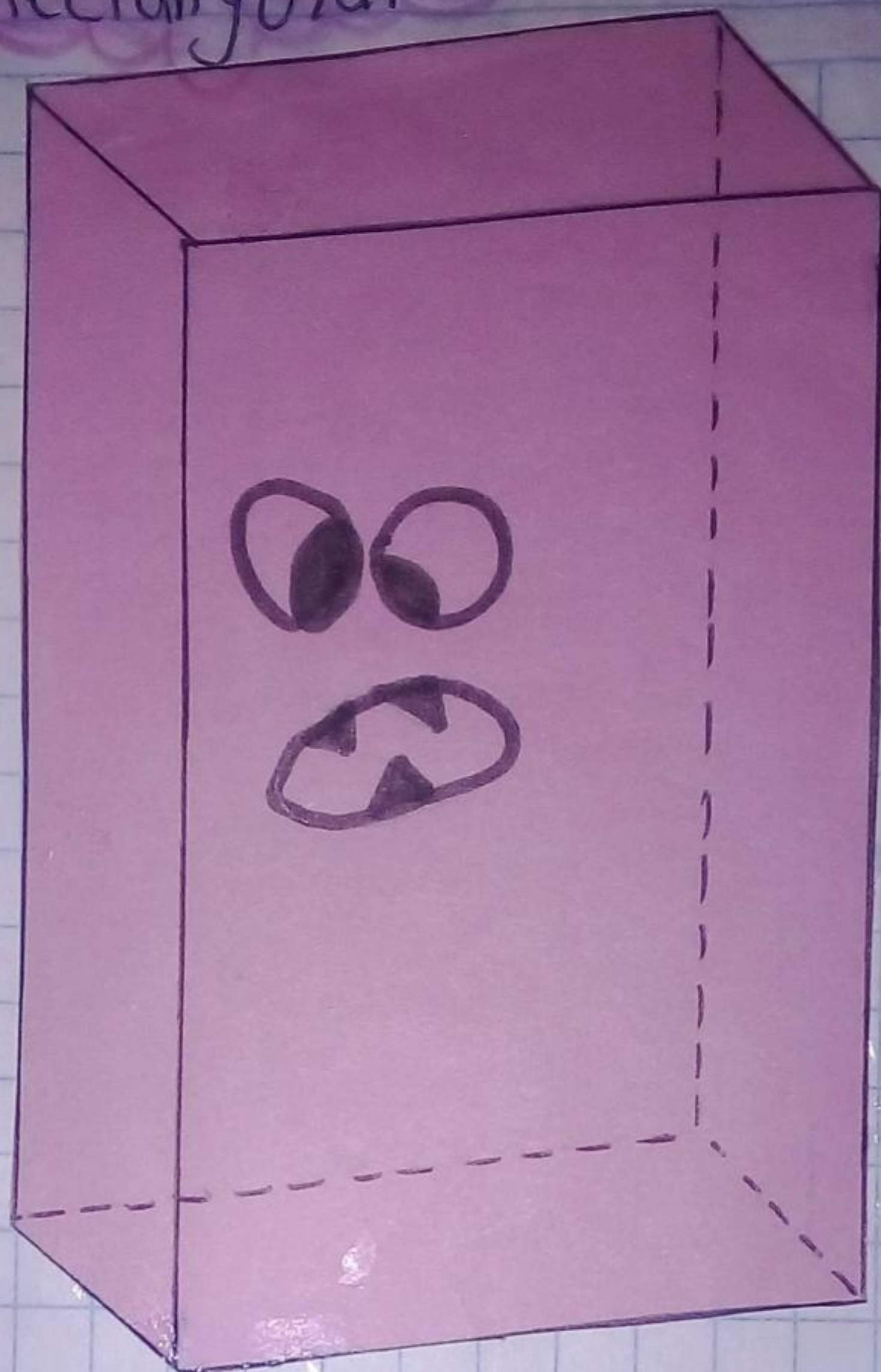
$$Ab = 8 \times 8$$

$$Ab = 64 \text{ cm}^2$$

$$V = 64 \times 8$$

$$V = 512 \text{ cm}^3$$

Prisma Rectangular



$$h = 2 \text{ cm}$$

$$b = 6 \text{ cm}$$

$$hc = 10 \text{ cm}$$

$$Ab = 6 \times 2$$

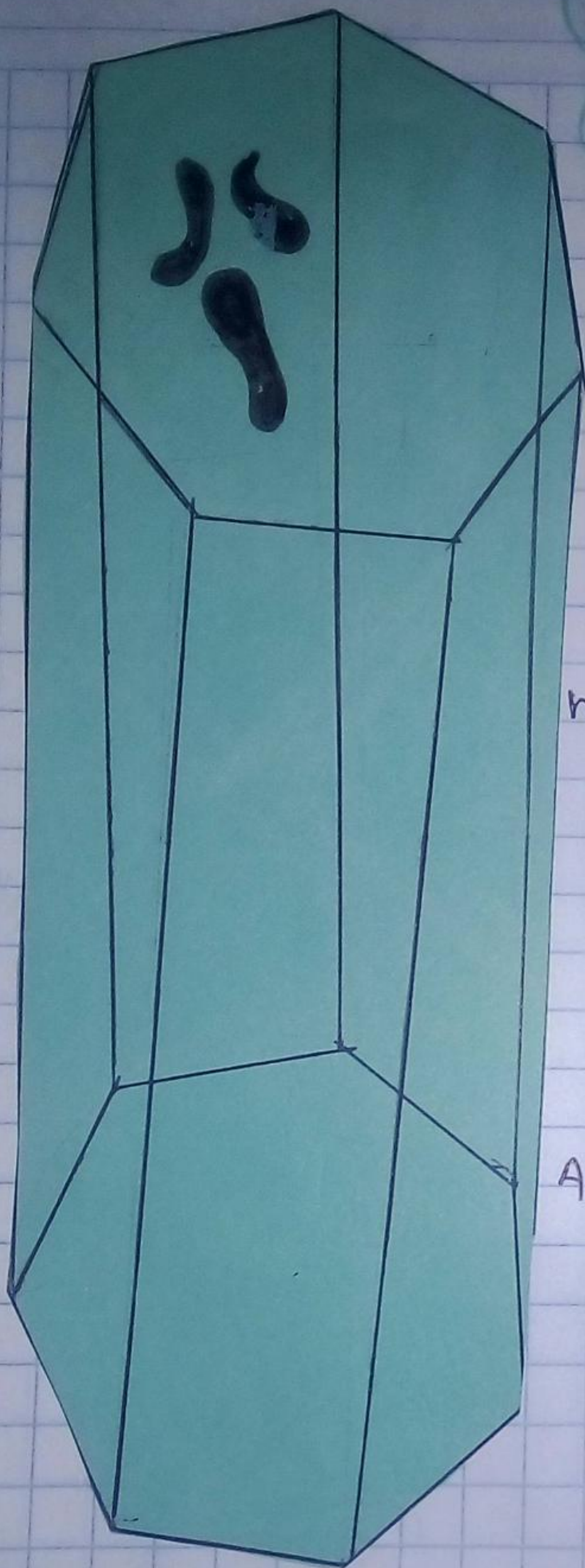
$$Ab = 12 \text{ cm}^2$$

$$V = 12 \times 10$$

$$V = 120 \text{ cm}^3$$

Prisma

Heptagonal



$$h_c = 12 \text{ cm}$$

$$A_b = \frac{21 \times 6}{2}$$

$$A_b = 63 \text{ cm}^2$$

$$V = 63 \times 12$$

$$V = 756 \text{ cm}^3$$

$$\text{Apotema} = 6 \text{ cm}$$

$$\text{Lado} = 3 \text{ cm}$$