

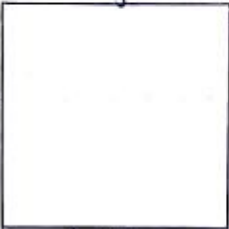
3.- Expresa cada medida en la unidad que se indica entre paréntesis

- a) $30 \text{ cm}^2 (\text{m}^2) = 0,003 \text{ m}^2$
- b) $0,005 \text{ km}^2 (\text{m}^2) = 5000 \text{ m}^2$
- c) $12 \text{ cm}^2 (\text{m}^2) = 0,0012 \text{ m}^2$
- d) $0,7 \text{ km}^2 (\text{dam}^2) = 7000 \text{ dam}^2$
- e) $36 \text{ mm}^2 (\text{dm}^2) = 0,0036 \text{ dm}^2$
- f) $9 \text{ hm}^2 (\text{dm}^2) = 9000000 \text{ dm}^2$
- g) $36 \text{ m}^2 (\text{km}^2) = 0,000036 \text{ km}^2$

4.- Expresa cada medida en la unidad que se indica entre paréntesis

- a) $2 \text{ hm}^2 34 \text{ dam}^2 (\text{m}^2) = 23400 \text{ m}^2$
- b) $13 \text{ m}^2 5 \text{ cm}^2 (\text{dm}^2) = 1300,05 \text{ dm}^2$
- c) $12 \text{ dam}^2 6 \text{ dm}^2 (\text{cm}^2) = 12000600 \text{ cm}^2$
- d) $5 \text{ km}^2 5 \text{ m}^2 (\text{dam}^2) = 50000,05 \text{ dam}^2$
- e) $4 \text{ dam}^2 345 \text{ m}^2 (\text{dm}^2) = 74500 \text{ dm}^2$
- f) $12 \text{ cm}^2 7 \text{ mm}^2 (\text{dm}^2) = 0,1207 \text{ dm}^2$
- g) $3 \text{ m}^2 12 \text{ mm}^2 (\text{dm}^2) = 300,0012 \text{ dm}^2$

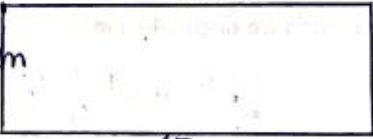
5.- Halla el área de un cuadrado de 8 cm de lado



$\text{Área}(\square) = L^2 = 8^2 = 64 \text{ cm}^2$

$\text{Área} = \underline{64 \text{ cm}^2}$

6.- Halla el área de un rectángulo de lados 15 cm y 12 cm

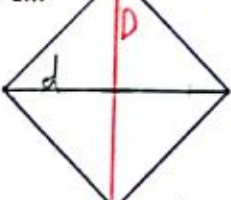


$b = 15 \text{ cm}$
 $a = 12 \text{ cm}$

$\text{Área}(\square) = b \cdot a$
 $\text{Área}(\square) = 15 \cdot 12 = 180$
 $\text{Área}(\square) = \underline{180 \text{ cm}^2}$

$$\begin{array}{r} 15 \\ \cdot 12 \\ \hline 30 \\ + 150 \\ \hline 180 \end{array}$$

7.- Halla el área de un rombo de diagonales 24 cm y 16 cm



$\begin{cases} D = 24 \text{ cm} \\ d = 16 \text{ cm} \end{cases}$


$\text{Área}(\diamond) = \frac{D \cdot d}{2}$

$\text{Área}(\diamond) = \frac{24 \cdot 16}{2} = \frac{384}{2} = 192$

$\text{Área}(\diamond) = \underline{192 \text{ cm}^2}$

$$\begin{array}{r} 24 \\ \cdot 16 \\ \hline 144 \\ + 240 \\ \hline 384 \end{array}$$

8.- Halla el área de un romboide de 16 cm de base y 15 cm de altura

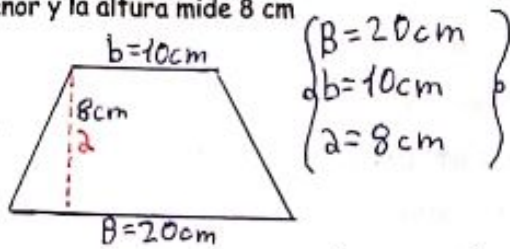


$\begin{cases} b = 16 \text{ cm} \\ a = 15 \text{ cm} \end{cases}$

$\text{Área}(\square) = b \cdot a$
 $\text{Área}(\square) = 16 \cdot 15 = 240$
 $\text{Área}(\square) = \underline{240 \text{ cm}^2}$

$$\begin{array}{r} 16 \\ \cdot 15 \\ \hline 80 \\ + 160 \\ \hline 240 \end{array}$$

9.- Halla el área de un trapecio sabiendo que la base menor mide 10 cm, la base mayor es doble que la menor y la altura mide 8 cm

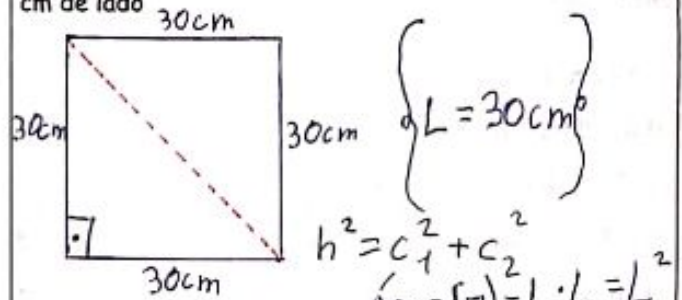


$$\text{Área}(\Delta) = \frac{(B+b) \cdot a}{2} = \frac{(20+10) \cdot 8}{2}$$

$$\text{Área}(\Delta) = \frac{(20+10) \cdot 8}{2} = \frac{30 \cdot 8}{2} = \frac{240}{2}$$

$$\text{Área}(\Delta) = \underline{120 \text{ cm}^2}$$

10.- Halla el área y la diagonal de un cuadrado de 30 cm de lado



$$x^2 = 30^2 + 30^2$$

$$x^2 = 900 + 900$$

$$x^2 = 1.800$$

$$x = \sqrt{1.800} = 90 \text{ cm}$$

$$\text{Diagonal} = \underline{90 \text{ cm}}$$

$$L = 30 \text{ cm}$$

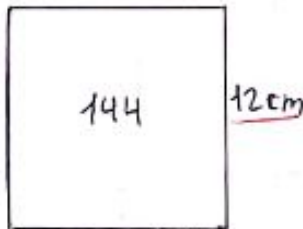
$$h^2 = c_1^2 + c_2^2$$

$$\text{Área}(\square) = L \cdot L = L^2$$

$$\text{Área}(\square) = 30^2 = 900$$

$$\text{Área}(\square) = \underline{900 \text{ cm}^2}$$

11.- Halla el lado de un cuadrado de área 144 cm²



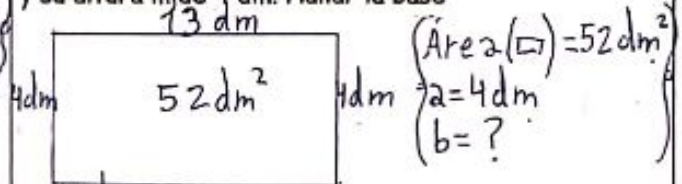
$$\left\{ \begin{array}{l} \text{Área}(\square) = 144 \text{ cm}^2 \\ L = ? \end{array} \right.$$

$$\text{Área}(\square) = L^2$$

$$144 = L^2 \Rightarrow L = \sqrt{144} = 12$$

$$L = \underline{12 \text{ cm}}$$

12.- De un rectángulo se sabe que su área mide 52 dm² y su altura mide 4 dm. Hallar la base



$$\text{Área}(\square) = b \cdot a$$

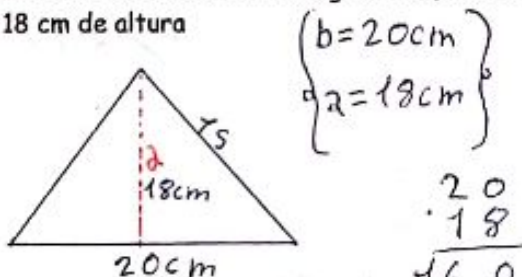
$$52 = x \cdot 4 \Rightarrow 52 = x \cdot 4$$

$$x = 52 : 4 = \underline{13 \text{ dm}}$$

$$13 \cdot 4 = 52 \text{ dm}^2$$

$$\left\{ \begin{array}{l} \text{Área}(\square) = 52 \text{ dm}^2 \\ a = 4 \text{ dm} \\ b = ? \end{array} \right.$$

13.- Hallar el área de un triángulo de 20 cm de base y 18 cm de altura



$$\text{Área}(\Delta) = \frac{b \cdot a}{2}$$

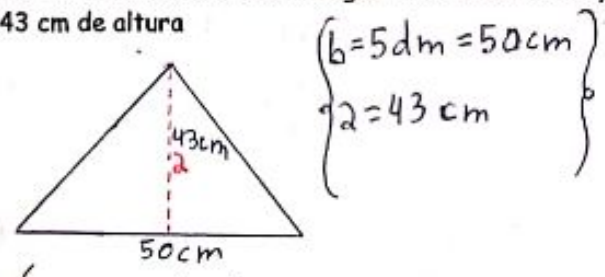
$$\text{Área}(\Delta) = \frac{20 \cdot 18}{2} = \frac{360}{2} = 180$$

$$\text{Área}(\Delta) = \underline{180 \text{ cm}^2}$$

$$\left\{ \begin{array}{l} b = 20 \text{ cm} \\ a = 18 \text{ cm} \end{array} \right.$$

$$\begin{array}{r} 20 \\ \cdot 18 \\ \hline 160 \\ + 20 \\ \hline 360 \end{array}$$

14.- Hallar el área de un triángulo de 5 dm de base y 43 cm de altura



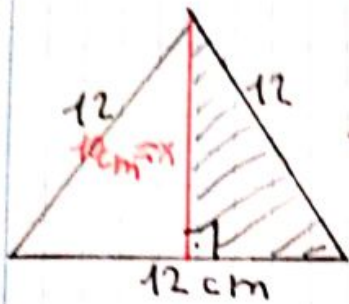
$$\text{Área}(\Delta) = \frac{b \cdot a}{2}$$

$$\text{Área}(\Delta) = \frac{50 \cdot 43}{2} = \frac{2150}{2} = 1075$$

$$\text{Área}(\Delta) = \underline{1075 \text{ cm}^2}$$

$$\underline{10,75 \text{ dm}^2}$$

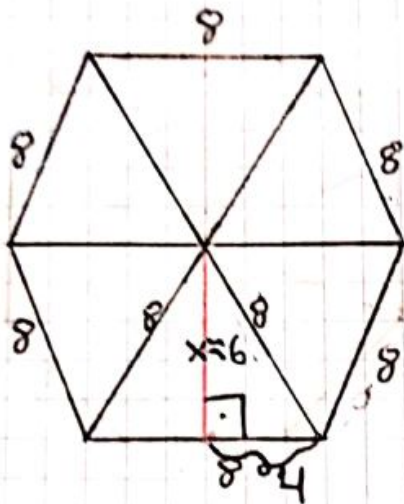
$$\left\{ \begin{array}{l} b = 5 \text{ dm} = 50 \text{ cm} \\ a = 43 \text{ cm} \end{array} \right.$$



$$\hat{A}rea = \frac{base \cdot altura}{2}$$

$$12^2 = 6^2 + x^2 \Rightarrow x^2 = 108$$

$$x = \sqrt{108} \quad x \approx 10$$



6 lados iguales
Hexágonos regular
¿Área(O)

$$\hat{A}rea(O) = 6 \cdot \hat{A}rea \Delta$$

hay 6 Δ

$$= 6 \cdot \frac{base \cdot altura}{2}$$

$$h^2 = c_1^2 + c_2^2$$

$$\left. \begin{array}{l} h = 8 \\ c_1 = 4 \\ c_2 = x \end{array} \right\}$$

$$8^2 = 4^2 + x^2$$

$$64 = 16 + x^2$$

$$64 - 16 = x^2$$

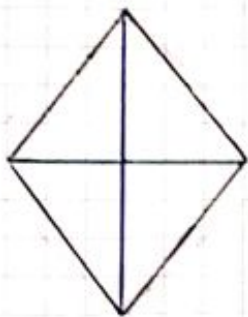
$$48 = x^2$$

$$x = \sqrt{48} \approx 6$$

$$\hat{A}rea \Delta = \frac{b \cdot a}{2} = \frac{8 \cdot 6}{2} = \frac{48}{2} = 24 \text{ cm}^2$$

$$\hat{A}rea O = 6 \cdot \hat{A}rea \Delta = 6 \cdot 24 = \underline{144 \text{ cm}^2}$$

$$P(O) = 6 \cdot 8 = \underline{48 \text{ cm}}$$



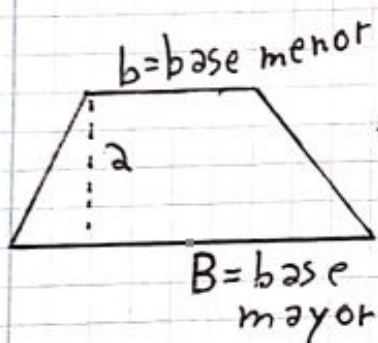
$P = 24 \text{ cm} \rightarrow$ diagonal mayor

$d = 16 \text{ cm} \rightarrow$ diagonal menor

$$\text{Área } (\diamond) = \frac{D \cdot d}{2} = \frac{24 \cdot 16}{2} = \frac{384}{2} =$$

$$= 192 \text{ cm}^2 \begin{cases} 0,0192 \text{ m}^2 \\ 19200 \text{ mm}^2 \end{cases}$$

$$\begin{array}{r} 24 \\ \times 16 \\ \hline 144 \\ + 240 \\ \hline 384 \end{array}$$



Cuadrilátero (4 Lados) tiene 2 lados paralelos y 2 no paralelos

$$\text{Área } (\square) = \frac{(B + b) \cdot a}{2}$$

$$b = 10 \text{ cm} \quad a = 8 \text{ cm}$$

$$B = 20 \text{ cm}$$

$$\text{Área} = \frac{(20 + 10) \cdot 8}{2} = \frac{30 \cdot 8}{2} = 120 \text{ cm}^2$$

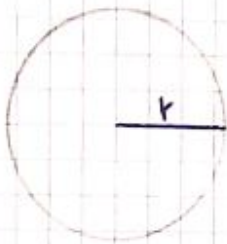
$$\text{Área } (\square) = 120 \text{ cm}^2$$



$$\text{Área}(\square) = L^2 = 5^2 = 25 \text{ cm}^2$$



$$\begin{aligned} \text{Área}(\Delta) &= \frac{b \cdot a}{2} = \frac{10 \cdot 6}{2} = \frac{60}{2} = \\ &= 30 \text{ cm}^2 \end{aligned}$$



$$\begin{aligned} \text{Área}(\circ) &= \pi \cdot r^2 = 3,14 \cdot 10^2 \\ \pi &= 3,14159 \dots \text{numero pi} \\ &= 3,14 \cdot 100 = 314 \text{ cm}^2 \end{aligned}$$



$$\text{Área}(\Delta) = \frac{b \cdot a}{2} = \frac{4 \cdot 3}{2} = \frac{12}{2} = 6 \text{ m}^2$$



$$\begin{aligned} \text{Área}(\square) &= \frac{(B+b) \cdot a}{2} = \frac{(10+6) \cdot 5}{2} = \\ &= \frac{16 \cdot 5}{2} = \frac{80}{2} = 40 \text{ cm}^2 \end{aligned}$$



$$\text{Área}(\square) = b \cdot a = 20 \cdot 3 = 60 \text{ cm}^2$$