

Nombre:

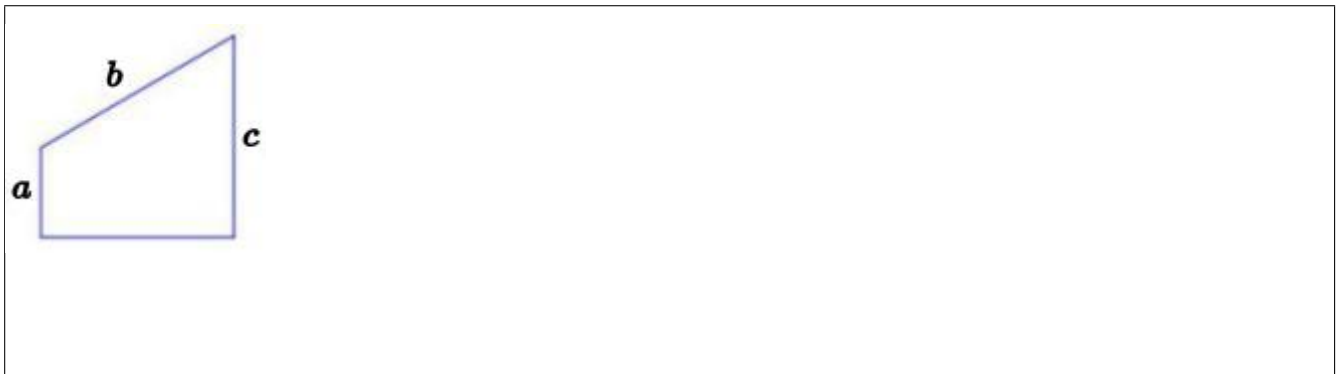
Fecha:

1. (1p) Enuncia el Teorema de Pitágoras.

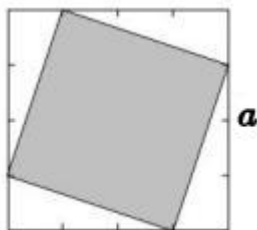
2. (1,75p) Find the area and perimeter of an isosceles triangle, its two equal sides are twenty *cm* each, and the other side is twenty-four *cm* long.

3. (1,75p) Find the area and perimeter of a rhombus with one diagonal sixteen *cm* long, and its equal sides are twelve *cm*.

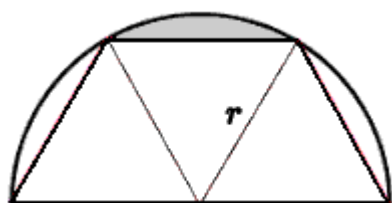
4. (1,75p) Calculate the area and perimeter of the following figure: $a = 2\text{ m}$, $b = 5\text{ m}$, $c = 5\text{ m}$



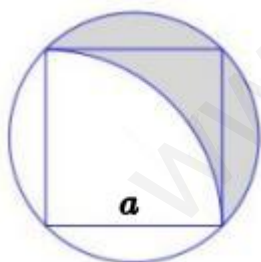
5. (1,75p) Find the area and perimeter of the shaded (*sombreada*) part of the figure: $a = 16\text{ cm}$



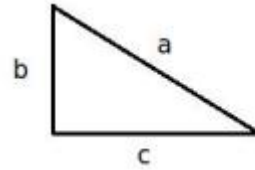
6. (1p) Find the area and perimeter of the shaded part of the figure: $r = 8\text{ cm}$



7. (1p) Find the area and perimeter of the shaded part of the figure: $a = 10\text{ m}$



1. (1p) En un triángulo rectángulo,
el cuadrado de la hipotenusa es igual a
la suma de los cuadrados de los catetos.



$$a^2 = b^2 + c^2$$

2. (1,75p) $p = 64 \text{ cm} \quad h = \sqrt{256} \text{ cm} \Rightarrow A = 12\sqrt{256} \text{ cm}^2$

(+0,1p) $h = 16 \text{ cm} \Rightarrow A = 192 \text{ cm}^2$

3. (1,75p) $p = 48 \text{ cm} \quad d = 2\sqrt{80} \text{ cm} \Rightarrow A = 16\sqrt{80} \text{ cm}^2$

(+0,1p) $d = 8\sqrt{5} \text{ cm} \Rightarrow A = 64\sqrt{5} \text{ cm}^2$

4. (1,75p) $l = 4 \text{ m} \Rightarrow p = 16 \text{ m} \quad A = 14 \text{ m}^2$

5. (1,75p) $l = \sqrt{160} \Rightarrow p = 4\sqrt{160} \text{ cm} \quad A = 160 \text{ cm}^2$

(+0,1p) $l = 4\sqrt{10} \text{ cm} \Rightarrow p = 16\sqrt{10} \text{ cm}$

6. (1p) $p = \frac{2\pi r}{6} + l \quad A = \frac{1}{6} \left(\pi r^2 - \frac{p a}{2} \right)$

$$p = \frac{8\pi}{3} + 8 \text{ cm} \quad a = \sqrt{48} \text{ cm} \Rightarrow A = \frac{32\pi}{3} - 4\sqrt{48} \text{ cm}^2$$

(+0,1p) $a = 4\sqrt{3} \text{ cm} \Rightarrow A = \frac{32\pi}{3} - 16\sqrt{3} \text{ cm}^2$

7. (1p) $p = \frac{2\pi r}{2} + \frac{2\pi a}{4} = \pi \left(r + \frac{a}{2} \right) \quad A = \pi r^2 - \frac{\pi a^2}{4} - \frac{1}{2} (\pi r^2 - a^2) = \frac{a^2}{2} !!$

$$r = \sqrt{50} \text{ m} \Rightarrow p = \pi (\sqrt{50} + 5) \text{ m} \quad A = 50 \text{ m}^2$$

(+0,1p) $r = 5\sqrt{2} \text{ m} \Rightarrow p = 5\pi (\sqrt{2} + 1) \text{ m}$