

Nome do aluno

Nº

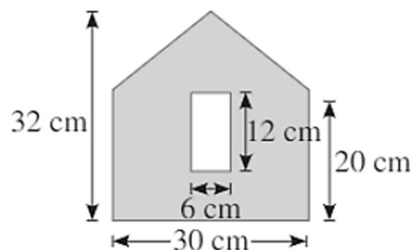
Data

/ / 20

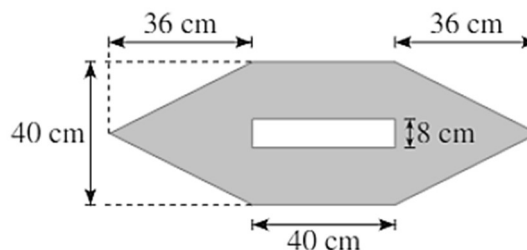
Área de figuras compostas

1. Calcula a área da parte colorida de cada uma das figuras

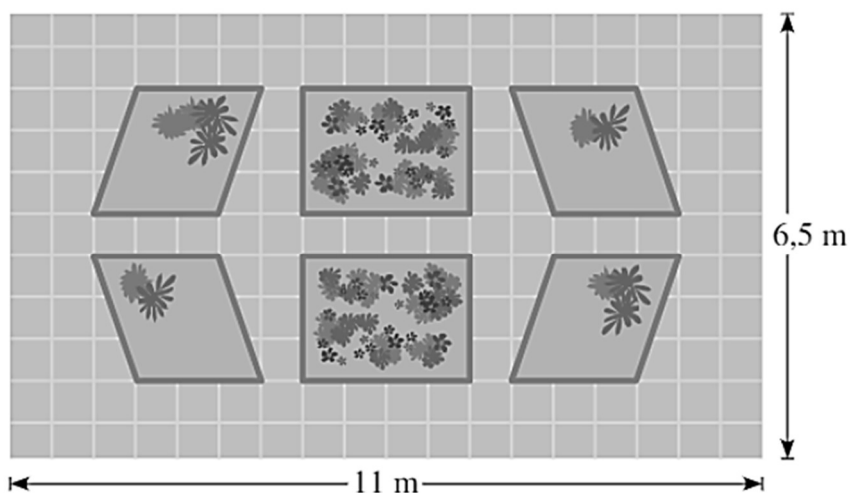
1.1.



1.2.

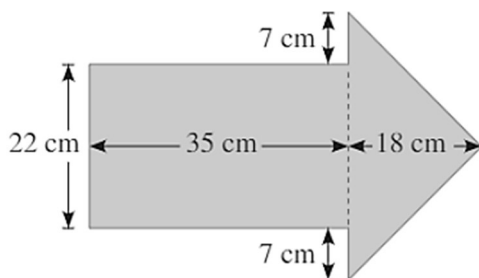


2. No jardim que se segue, todos os canteiros têm as mesmas dimensões, 2 metros de comprimento e 1,5 metros de largura ou altura. Determina a área da parte pavimentada.

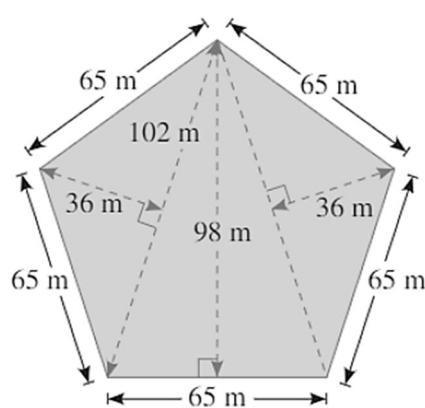


3. Calcula a área de cada uma das figuras.

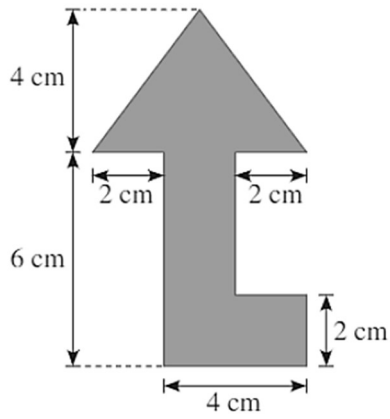
1.1.



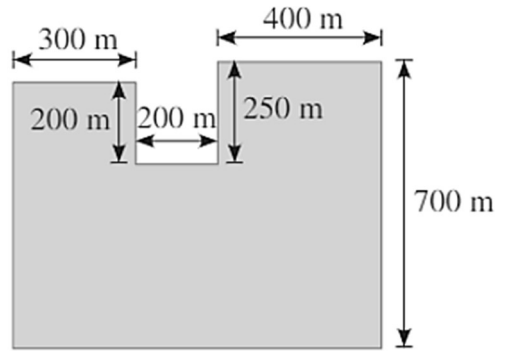
1.2.



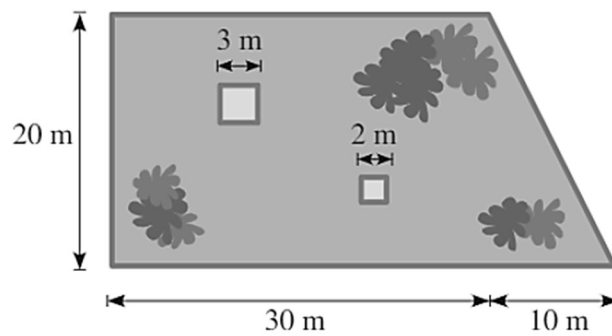
1.3.



1.4.



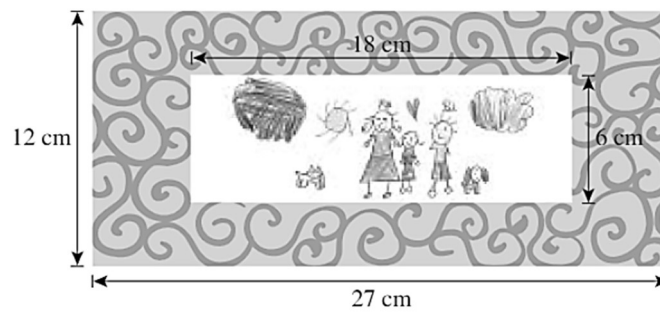
4. A figura representa um jardim com um relvado e dois lagos quadrados.



4.1. Calcula a área do jardim.

4.2. Calcula a área da parte relvada.

5. Calcula a área da moldura que a tia colocou à volta do desenho oferecido pela Mariana.



Soluções

1.

$$\begin{aligned} 1.1. \quad A_{\text{triângulo}} &= \frac{30 \times 12}{2} = \frac{360}{2} = 180 \text{ cm}^2 \\ A_{\text{retângulo "maior"}} &= 30 \times 20 = 600 \text{ cm}^2 \\ A_{\text{retângulo "branco"}} &= 6 \times 12 = 72 \text{ cm}^2 \\ A_{\text{parte colorida}} &= 180 + 600 - 72 = 708 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} 1.2. \quad A_{\text{triângulo}} &= \frac{40 \times 36}{2} = \frac{1440}{2} = 720 \text{ cm}^2 \\ A_{\text{quadrado}} &= 40 \times 40 = 1600 \text{ cm}^2 \\ A_{\text{retângulo "branco"}} &= 40 \times 8 = 320 \text{ cm}^2 \\ A_{\text{parte colorida}} &= 2 \times 720 + 1600 - 320 = 2720 \text{ cm}^2 \end{aligned}$$

2. $A_{\text{jardim}} = 11 \times 6,5 = 71,5 \text{ m}^2$

$$A_{\text{cada quadrilátero}} = 2 \times 1,5 = 3 \text{ m}^2$$

$$A_{\text{parte pavimentada}} = 71,5 - 6 \times 3 = 53,5 \text{ m}^2$$

3.

$$\begin{aligned} 3.1. \quad A_{\text{retângulo}} &= 22 \times 35 = 770 \text{ cm}^2 \\ A_{\text{triângulo}} &= \frac{(22 + 7 + 7) \times 18}{2} = \frac{36 \times 18}{2} = 324 \text{ cm}^2 \\ A_{\text{figura}} &= 770 + 324 = 1094 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} 3.2. \quad A_{\text{triângulo}} &= \frac{102 \times 36}{2} = \frac{3672}{2} = 1836 \text{ m}^2 \\ A_{\text{triângulo}} &= \frac{65 \times 98}{2} = \frac{6370}{2} = 3185 \text{ m}^2 \\ A_{\text{figura}} &= 2 \times 1836 + 3185 = 6857 \text{ m}^2 \end{aligned}$$

$$\begin{aligned} 3.3. \quad A_{\text{triângulo}} &= \frac{6 \times 4}{2} = \frac{24}{2} = 12 \text{ cm}^2 \\ A_{\text{retângulo}} &= 4 \times 2 = 8 \text{ cm}^2 \\ A_{\text{retângulo}} &= 4 \times 2 = 8 \text{ cm}^2 \\ A_{\text{figura}} &= 12 + 8 + 8 = 28 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} 3.4. \quad A_{\text{retângulo}} &= 400 \times 700 = 280\,000 \text{ m}^2 \\ A_{\text{retângulo}} &= 300 \times 650 = 195\,000 \text{ m}^2 \\ A_{\text{retângulo}} &= 200 \times 500 = 100\,000 \text{ m}^2 \\ A_{\text{figura}} &= 280\,000 + 195\,000 + 100\,000 = 575\,000 \text{ m}^2 \end{aligned}$$

4.

$$\begin{aligned} 4.1. \quad A_{\text{retângulo}} &= 20 \times 30 = 600 \text{ m}^2 \\ A_{\text{triângulo}} &= \frac{10 \times 20}{2} = \frac{200}{2} = 100 \text{ m}^2 \\ A_{\text{jardim}} &= 600 + 100 = 700 \text{ m}^2 \end{aligned}$$

$$\begin{aligned} 4.2. \quad A_{\text{quadrado}} &= 2 \times 2 = 4 \text{ m}^2 \\ A_{\text{quadrado}} &= 3 \times 3 = 9 \text{ m}^2 \\ A_{\text{parte relvada}} &= 700 - (9 + 4) = 700 - 13 = 687 \text{ m}^2 \end{aligned}$$

5. $A_{\text{desenh}} = 18 \times 6 = 108 \text{ cm}^2$

$$A_{\text{total}} = 27 \times 12 = 324 \text{ cm}^2$$

$$A_{\text{moldura}} = 324 - 108 = 216 \text{ cm}^2$$