


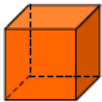
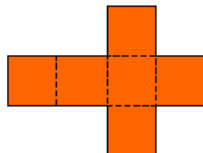
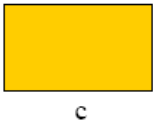
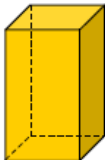
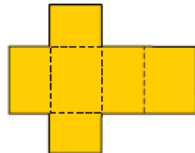
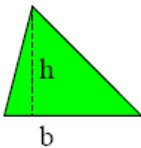
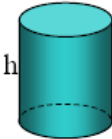
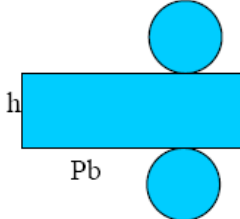
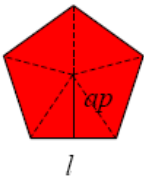
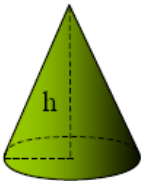
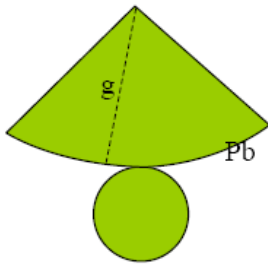
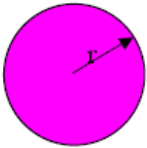

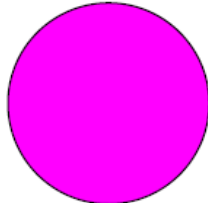
CENTRO NOVAS OPORTUNIDADES DE SANTO ANDRÉ
MATEMÁTICA PARA A VIDA

APONTAMENTOS – MV₃B – PERÍMETROS, ÁREAS E VOLUMES

NOME:

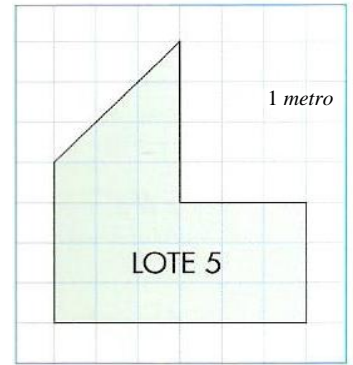
DATA:

ÁREAS DE POLÍGONOS E VOLUMES DE SÓLIDOS GEOMÉTRICOS

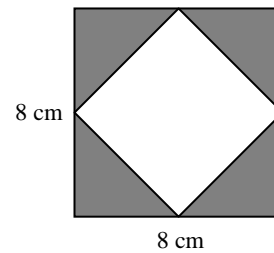
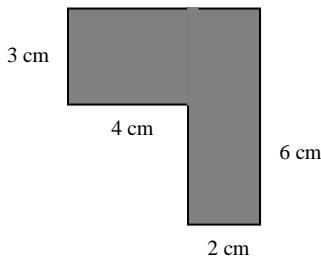
Área e Perímetro	Volume	Planificação
<p>Quadrado</p>  <p>$A = a \cdot a = a^2$ $P = 4a$</p>	<p>Cubo</p>  <p>$V = A_b \cdot h = a \cdot a \cdot a = a^3$</p>	 <p>$A_t = 6A_b$</p>
<p>Retângulo / Paralelogramo</p>  <p>$A = c \cdot l$ ou $b \cdot h$ $P = 2c + 2l$</p>	<p>Prisma / Paralelepípedo</p>  <p>$V = A_b \cdot h = c \cdot l \cdot h$</p>	 <p>$A_t = 2A_b + P_b \cdot h$</p>
<p>Triângulo</p>  <p>$A = \frac{b \cdot h}{2}$ $P = \text{soma 3 lados}$</p>	<p>Cilindro</p>  <p>$V = A_b \cdot h$</p>	 <p>$A_t = 2A_b + P_b \cdot h$</p>
<p>Pentágono, Hexágono regulares</p>  <p>$A = \frac{l \cdot ap}{2} n$ ($n = n^\circ$ lados) $P = \text{soma } n \text{ lados}$</p>	<p>Cone</p>  <p>$V = \frac{1}{3} A_b \cdot h$</p>	 <p>$A_t = A_b + \frac{P_b}{2} \cdot g$ (geratriz)</p>
<p>Círculo / Circunferência</p>  <p>$A = \pi r^2$ $P = 2\pi r$</p>	<p>Esfera</p>  <p>$V = \frac{4}{3} \pi r^3$</p>	 <p>$A_t = 4\pi r^2$</p>

Exercícios de Aplicação:

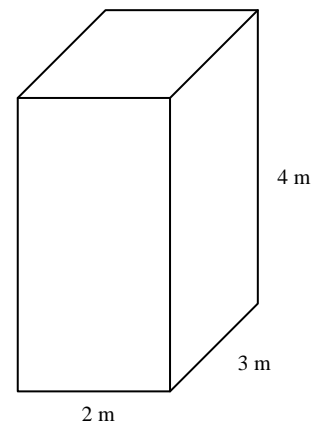
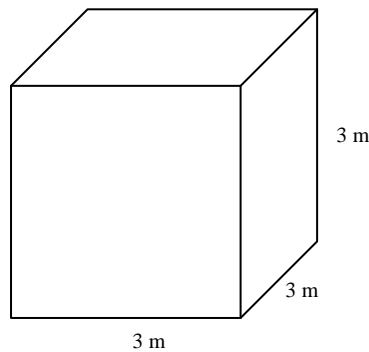
1. Sra. Lurdes quer vender um pequeno lote de terreno (figura ao lado). Qual a **área** do lote?



2. Determina as **áreas coloridas** das figuras seguintes.



3. As figuras seguintes representam um **cubo** e um **paralelepípedo**, respectivamente. **Determina** os seus volumes e diz **qual** deles tem maior volume.



Fórmulas para o cálculo de Áreas:

$\text{Área Rectângulo} = \text{base} \times \text{altura}$
 $\text{Área Quadrado} = \text{lado} \times \text{lado}$
 $\text{Área Triângulo} = \frac{\text{base} \times \text{altura}}{2}$

Fórmulas para o cálculo de Volumes:

$\text{Volume Cubo} = a^3$
 $\text{Volume paralelepípedo} = a \times b \times c$