

5.  $AB = 10$   $V = 15$   $V = 150$

$AB = 10$  alternative C

6.  $AB = x$   $AB = 2(x-2x)^2 + 2(y-2y)^2$   
 $AB = 4x^2 + 4y^2$   
 $4x^2 = 2x^2 + (4x^2 + 4y^2)$   
 $4x^2 = 6x^2 + 4y^2$   
 $4x^2 = 6x^2 - 4x^2 = 0$

$\Delta = (-6x)^2 - 4 \cdot (-4x^2)$   
 $\Delta = 36x^2 + 16x^2$   
 $\Delta = 100x^2$

$x = \frac{6x \pm \sqrt{100x^2}}{2 \cdot 4} = \frac{6x \pm 10x}{8}$   
 $x' = \frac{16x}{8} = 2x$   
 $x'' = \frac{-4x}{8} = -\frac{1}{2}x$

$x = 2, z = 2$   $AB = x \cdot x$   $V = x^2 \cdot x$   
 $AB = x^2$   $V = x^3$   
 $2$   $2$  alternative C

## Tarefa básica - Prismas / paralelepípedos Retângulo

1.  $Ab = 12$

$Ac = 4,5$   $x = Ac = 12x$

$2x^2 + 12x = 10$

$2x^2 + 12x - 10 = 0$

$\Delta = 12^2 - 4 \cdot 2 \cdot (-10)$

$\Delta = 144 + 80$

$\Delta = 224$

$x = \frac{-12 \pm \sqrt{224}}{4} = \frac{-12 \pm 14,93}{4} = 1,23$

2.  $24\sqrt{3} = 3\sqrt{3} \cdot \frac{L^2}{2}$

$48\sqrt{3} = 3\sqrt{3} \cdot L^2$

$L^2 = 48\sqrt{3}$

$3\sqrt{3}$

$L = \sqrt{16}$

$L = 4$

$AL = 6 \cdot 4 \cdot 2\sqrt{3}$

$AL = 48\sqrt{3} \text{ m}^2$

3.  $Ab = 3\sqrt{3} \cdot \frac{L^2}{2}$

$AL = 6 \cdot 2 \cdot \sqrt{3}$

$A = 2 \cdot 6\sqrt{3} + 12\sqrt{3}$

$AL = 12\sqrt{3}$

$A = 24\sqrt{3}$

$Ab = 6\sqrt{3}$

alternativa B

4.  $5^2 = 3^2 + L^2$

$Ab = \frac{(2 \cdot 8) \cdot 4}{2}$

$V = 20 \cdot 2$

$L^2 = 25 - 9$

$2$

$V = 100$

$L = \sqrt{16}$

$Ab = 20$

alternativa D