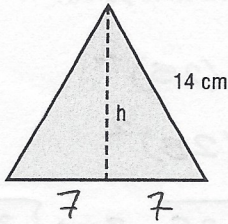


## PROBLEMAS DE APLICACIÓN DEL TEOREMA DE PITÁGORAS

**1**

Calcula la altura de un triángulo equilátero de 14 cm de lado.

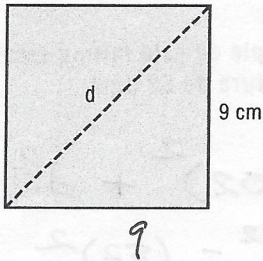


$$\begin{aligned}
 a^2 &= \sqrt{(14)^2 - (7)^2} \\
 &= \sqrt{196 - 49} \\
 &= \sqrt{147} = 12.12
 \end{aligned}$$

$$\therefore \boxed{a = 12.12} \\
 (a = h)$$

**2**

Calcula la diagonal de un cuadrado de 9 cm de lado.



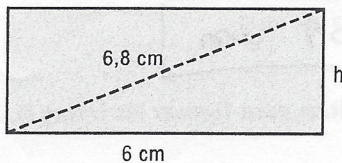
$$d^2 = (9)^2 + (9)^2$$

$$d = \sqrt{81 + 81} = \sqrt{162} = 12.72$$

$$\therefore \boxed{d = 12.72}$$

**3**

Calcula la altura de un rectángulo cuya diagonal mide 6,8 cm y la base 6 cm.



$$h = \sqrt{(6.8)^2 - (6)^2}$$

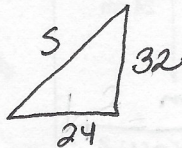
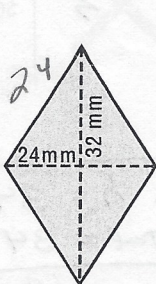
$$= \sqrt{46.24 - 36}$$

$$= \sqrt{10.24} = 3.2$$

$$\therefore \boxed{h = 3.2}$$

**4**

Calcula el lado de un rombo cuyas diagonales miden 32 mm y 24 mm.



$$S = \sqrt{(32)^2 + (24)^2}$$

$$= \sqrt{1024 + 576}$$

$$= \sqrt{1600} = 40$$

$$\therefore \boxed{\text{side} = 40}$$