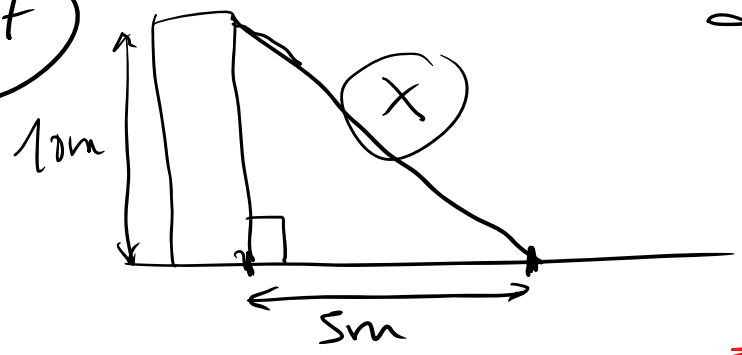
20/05/20

17



T^a de Pitágoras

$x^2 = 5^2 + 10^2$

$x^2 = 125$

$x = \sqrt{125}$

Al poner $\sqrt{}$ ya no se pone x^2

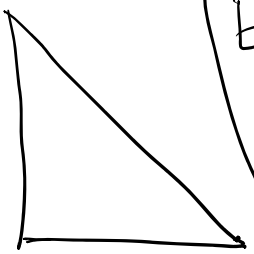
$x = 11{,}18$

El cable mide 11,18 m

60

Un triángulo es rectángulo cuando verifica el t^a de Pitágoras

a) $22\overset{c}{m}, 17\overset{a}{m}, 10\overset{b}{m}$



En un triángulo rectángulo, la hipotenusa SIEMPRE es el lado mayor

¿ $22^2 = 17^2 + 10^2$

$484 = 389$ Falso ⇒ No es un triángulo rectángulo

b) 12 cm, 35 cm, 37 cm

$\parallel$ $\parallel$ $\parallel$

a b c

¿ $37^2 = 12^2 + 35^2$?

$1369 = 1369 \Rightarrow$

$\Rightarrow$ El triángulo sí es rectángulo.

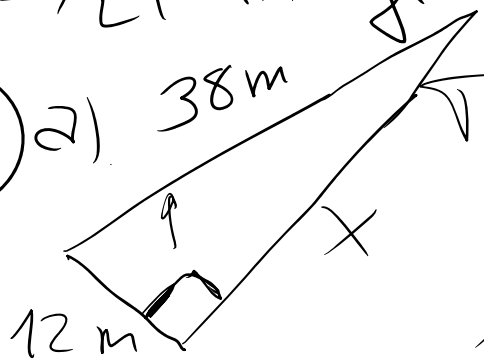
c) 25cm, 28cm, 32cm ¿$32^2 = 25^2 + 28^2$?
a b c
$1024 = 1409$ Falso

$\Rightarrow$ El triángulo no es rectángulo

d) 40cm, 41cm y 9cm ¿$41^2 = 40^2 + 9^2$?
a c b
$1681 = 1681$ ✓

$\Rightarrow$ El triángulo es rectángulo.

61) a)



Teorema de Pitágoras

$38^2 = 12^2 + x^2$

$1444 = 144 + x^2$

$1444 - 144 = x^2$

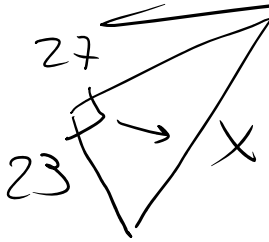
$1300 = x^2$

$\sqrt{1300} = x$

$36,06 = x$

El otro lado mide 36,06 m

b)



Teorema de Pitágoras

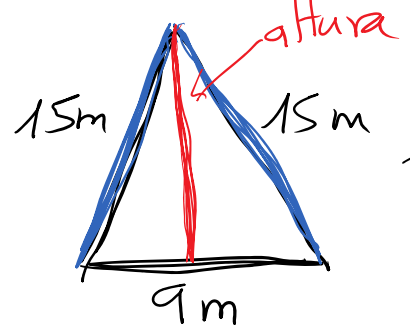
$x^2 = 27^2 + 23^2$

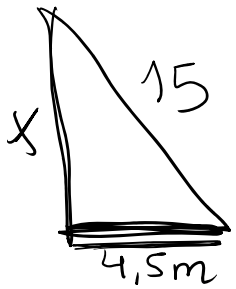
$x^2 = 1258$

$x = \sqrt{1258} \simeq 35,47$

La hipotenusa mide 35,47 mm

63





$15^2 = 4{,}5^2 + x^2$

$225 = 20{,}25 + x^2$

$225 - 20{,}25 = x^2$

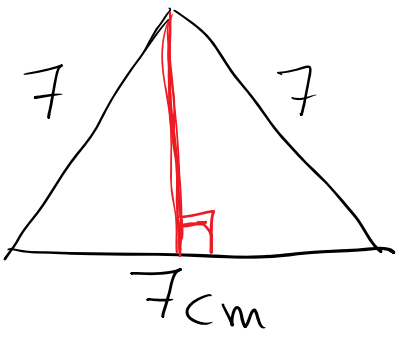
$204{,}75 = x^2$

$\sqrt{204{,}75} = x$

$14{,}31 = x$

La altura del triángulo es 14,31m

64



Triángulo equilátero = 3 lados iguales

Tª de Pitágoras

$7^2 = 3{,}5^2 + x^2$

$49 = 12{,}25 + x^2$

$49 - 12{,}25 = x^2$

$36{,}75 = x^2$

$\sqrt{36{,}75} = x$

$6{,}06 = x$

La altura del triángulo es 6,06m

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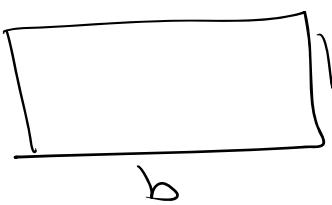
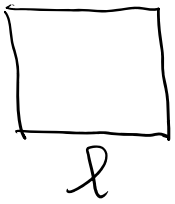
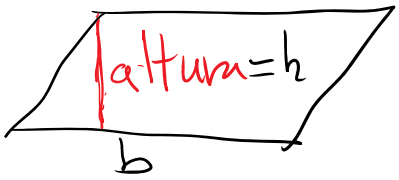
Áreas de los cuadriláteros



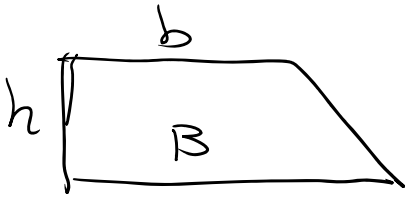
$A_{rectángulo} = bh$



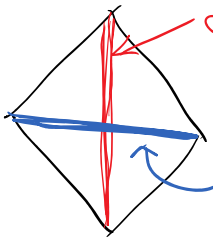
$$A_{cuadrado} = l^2$$



$$A_{romboide} = bh$$

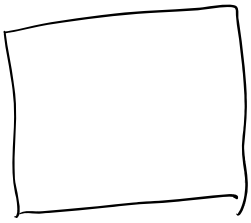


$$A_{trapecio} = \frac{(B+b)h}{2}$$



$$A_{rombo} = \frac{Dd}{2}$$

19 a)

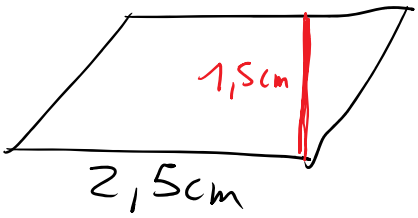


$$A_{cuadrado} = l^2 = 2^2 = 4\,cm^2$$

b)

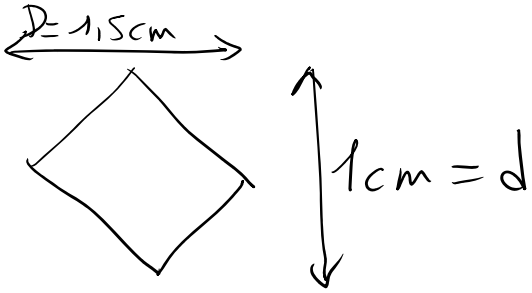
$$A_{rectángulo} = b \cdot h = 2{,}5 \cdot 1{,}5 = 3{,}75\,cm^2$$

c)



$$A_{romboide} = bh = 2{,}5 \cdot 1{,}5 = 3{,}75\,cm^2$$

d)



$$A_{rombo} = \frac{D \cdot d}{2} = \frac{1{,}5 \cdot 1}{2} = 0{,}75\,cm^2$$

Para entregar mañana jueves

Página 251 → Ejercicios 20, 21, 22, 23 y 24

El 20 sin dibujar