

Fitxes per practicar el **TEOREMA de PITÀGORES**

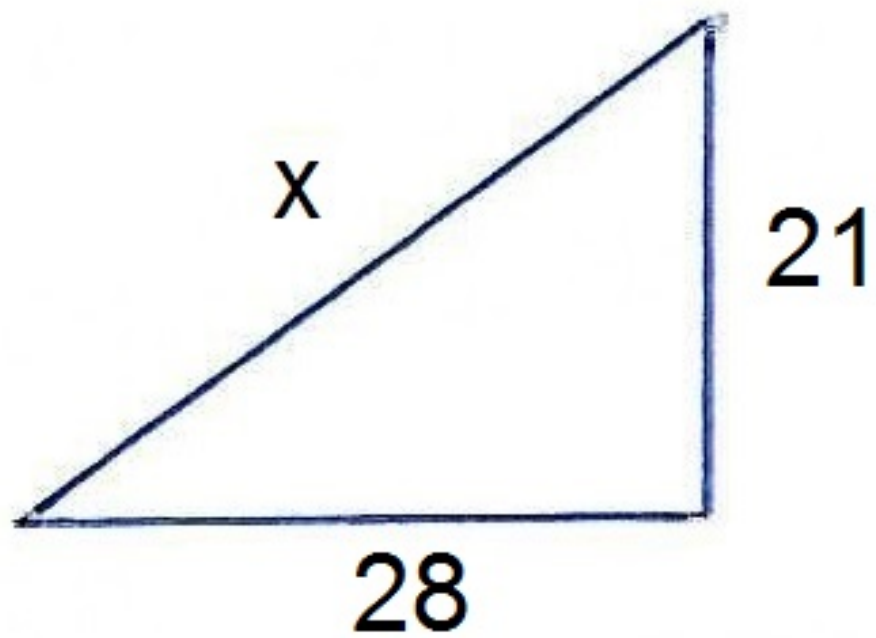
- Triangles problema: pàgs. 2 – 11 → Cal que trobis la llargada del costat “x”.

(Fes clic sobre l'enllaç “**solució**” per a veure-la)

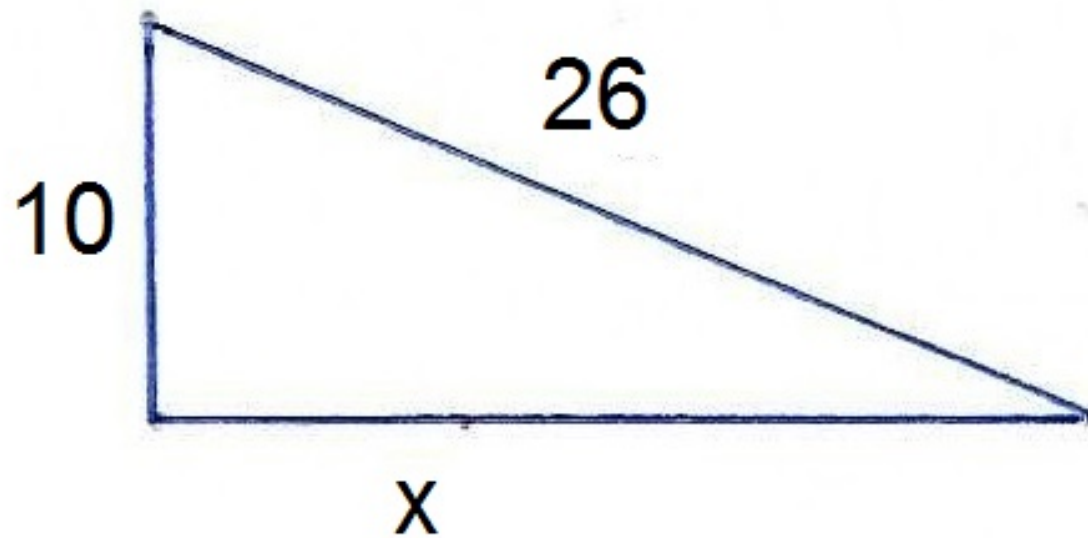
- Resolucions: pàgs. 12 – 21 (Fes clic sobre l'enllaç “**tornar**” per a tornar al triangle)

NOTA: utilitza el mode “veure en pantalla completa” per a usar aquest document !!

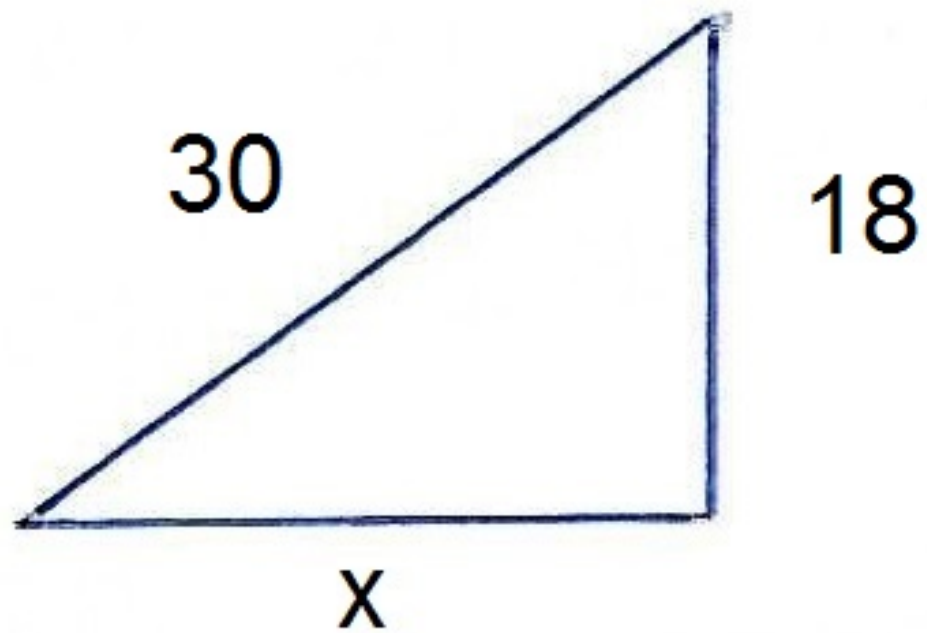
Fet per: alumnes de 2n ESO de l'INS Júlia Minguell (Badalona, 2019)



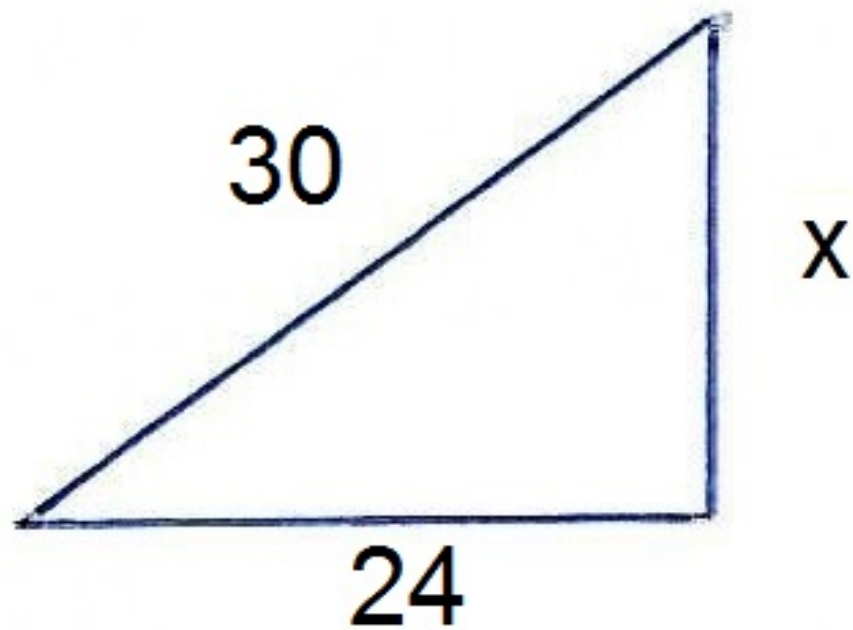
[solució](#)



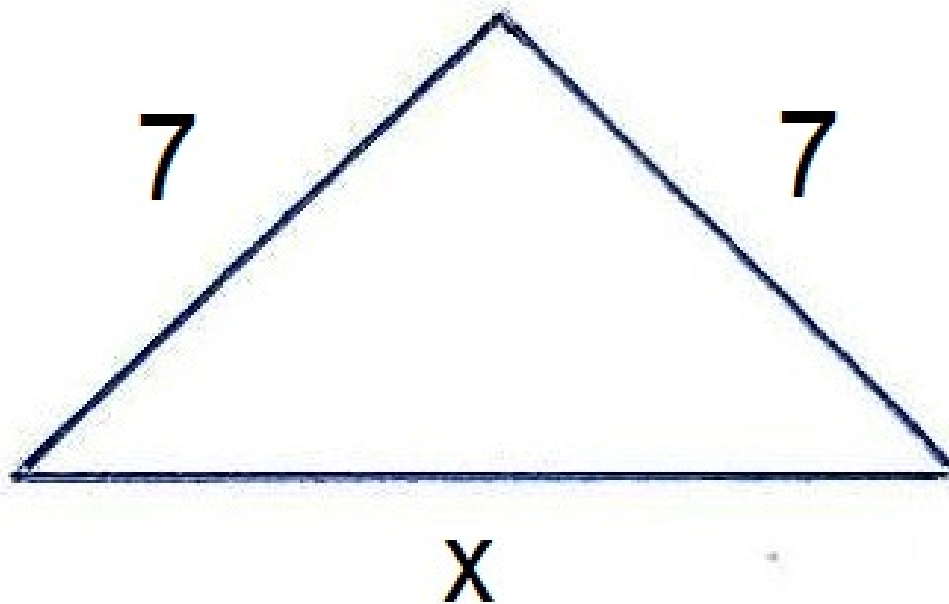
[solució](#)



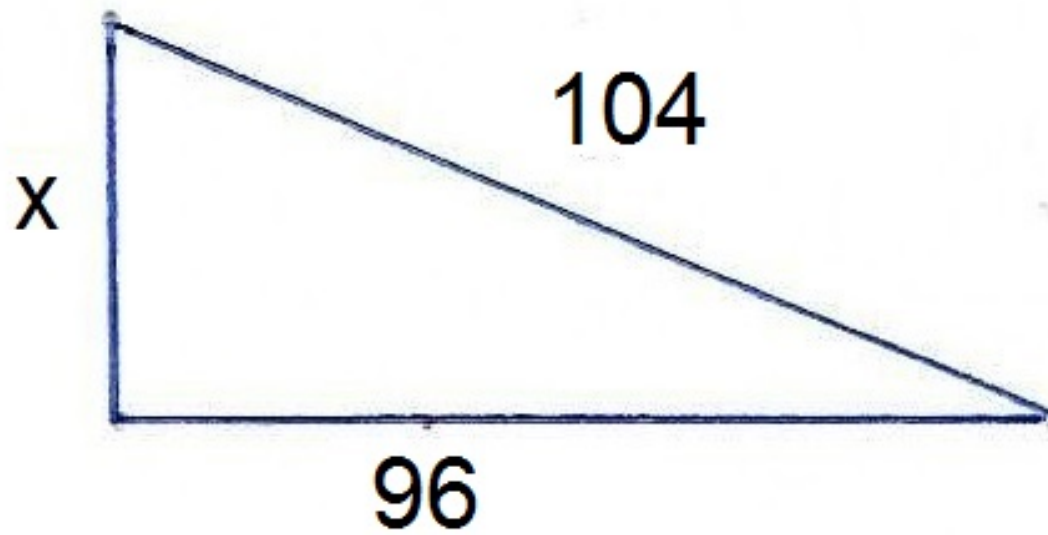
[solució](#)



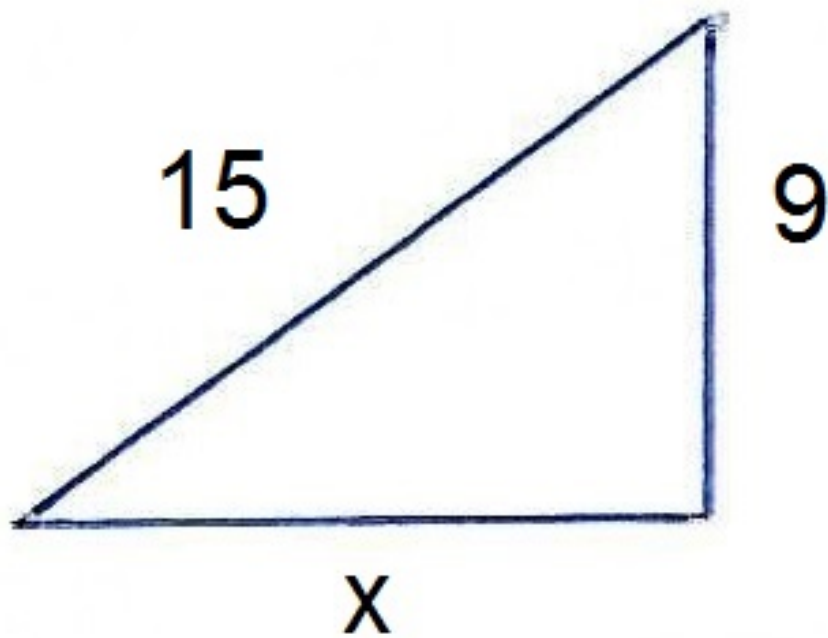
[solució](#)



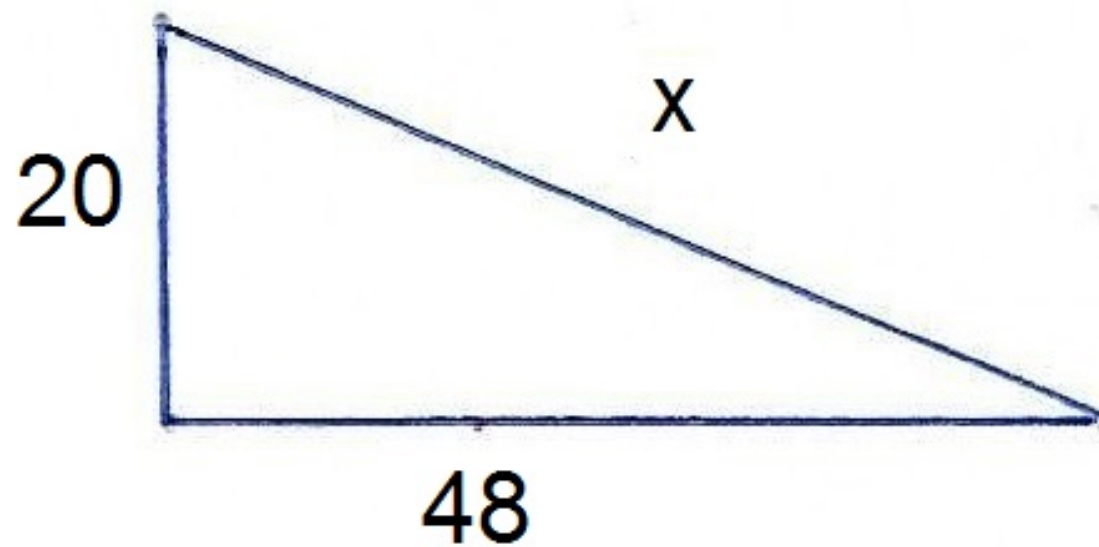
[solució](#)



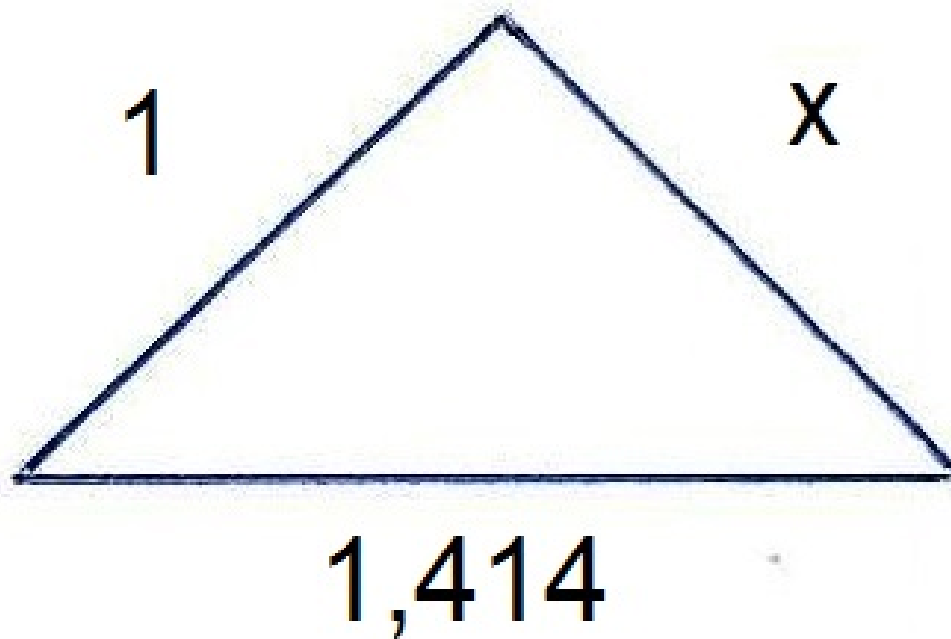
[solució](#)



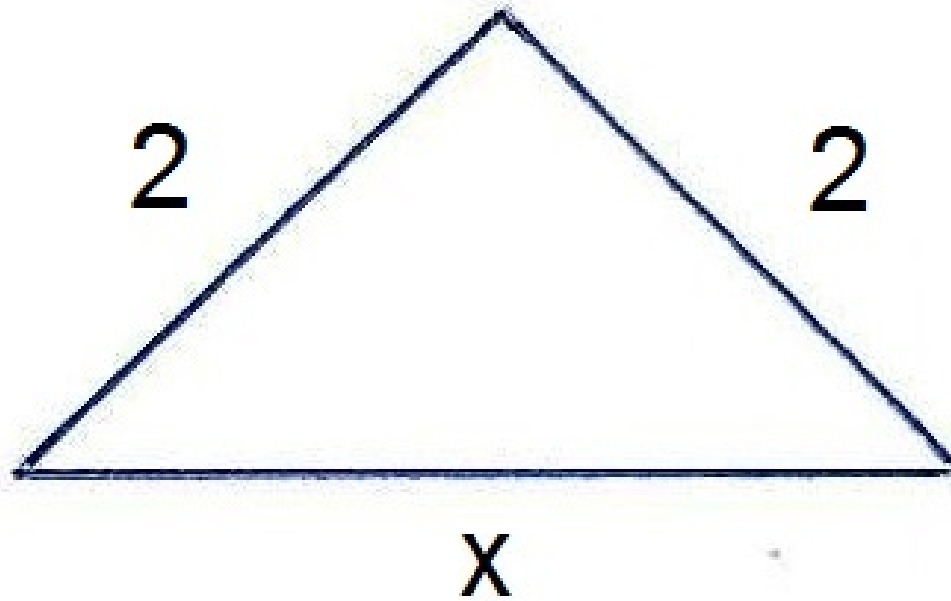
[solució](#)



[solució](#)



[solució](#)



[solució](#)

$$x^2 = \underbrace{21^2}_{441} + \underbrace{28^2}_{784} = 1225$$

$$\rightarrow x = \sqrt{1225} = 35$$

[tornar](#)

$$x^2 + 10^2 = 26^2$$

$$\hookrightarrow x^2 + 100 = 676$$

$$\hookrightarrow x^2 = 576$$

$$\hookrightarrow x = \sqrt{576} = 24$$

[tornar](#)

$$18^2 + x^2 = 30^2$$

$$\hookrightarrow 324 + x^2 = 900$$

$$-324 \hookrightarrow x^2 = 576$$

$$\hookrightarrow x = \sqrt{576} = 24 //$$

tornar

$$x^2 + 24^2 = 30^2$$
$$\rightarrow x^2 + 576 = 900$$
$$\rightarrow x^2 = 324$$
$$\rightarrow x = \sqrt{324} = 18$$

tornar

$$x^2 = \left[\begin{array}{c} 7 \\ 49 \end{array} \right]^2 + \left[\begin{array}{c} 7 \\ 49 \end{array} \right]^2 = 98$$

$$\rightarrow x = \sqrt{98} = 9,899$$

tornar

$$\begin{aligned}x^2 + 96^2 &= 104^2 \\ \underbrace{\quad\quad\quad}_{9216} & \quad \underbrace{\quad\quad\quad}_{10816} \\ \rightarrow x^2 + 9216 &= 10816 \\ -9216 & \\ \rightarrow x^2 &= 1600 \\ \rightarrow x &= \sqrt{1600} = 40\end{aligned}$$

[tornar](#)

$$x^2 + 9^2 = 15^2$$

$$\hookrightarrow x^2 + 81 = 225$$

$$-81 \quad \hookrightarrow x^2 = 144$$

$$\hookrightarrow x = \sqrt{144} = \underline{\underline{12}} \checkmark$$

[tornar](#)

$$x^2 = \underbrace{20^2}_{400} + \underbrace{48^2}_{2304} = 2704$$
$$\rightarrow x = \sqrt{2704} = 52,,$$

tornar

$$\begin{aligned}x^2 + 1^2 &= 1414^2 \\ \downarrow \\ x^2 + 1 &= 2 \\ \downarrow \\ x^2 &= 1\end{aligned}$$

$$x = \sqrt{1} = 1$$

[tornar](#)

$$x^2 = \underbrace{2^2}_{4} + \underbrace{2^2}_{4} = 8$$

$$x = \sqrt{8} = \underline{\underline{2,828}}$$

[tornar](#)