

SERIE 7

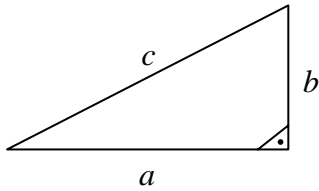
Théorème de Pythagore - Théorème de la hauteur - Théorème d'Euclide

Théorème de Pythagore

calculatrice autorisée

Théorème : (rappel)

Soit le **triangle rectangle** ci-dessous :

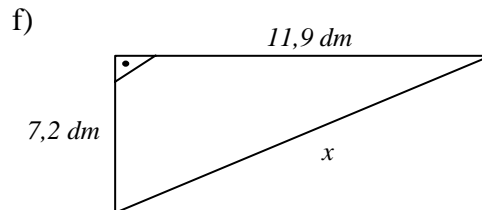
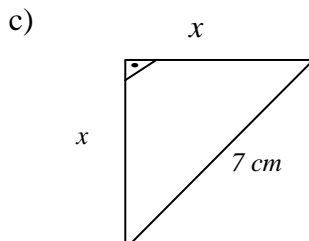
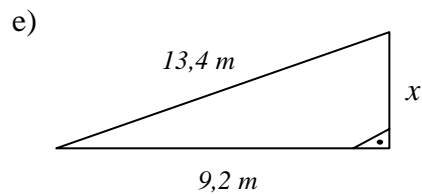
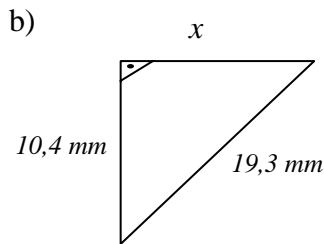
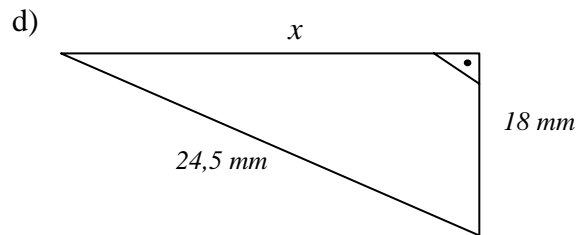
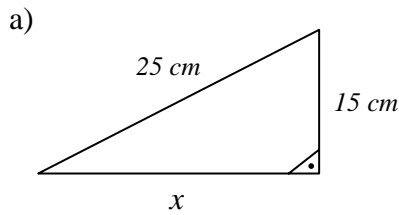


a et ***b*** sont les **cathètes**
c est l'**hypoténuse**

On a la relation suivante, appelée le **théorème de Pythagore** : $a^2 + b^2 = c^2$

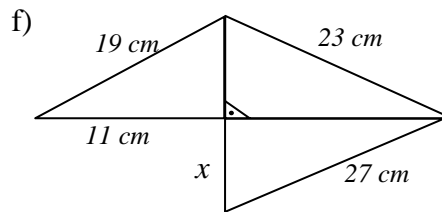
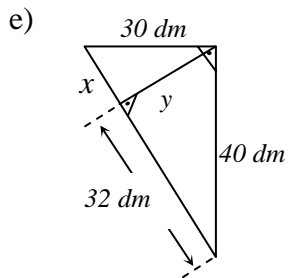
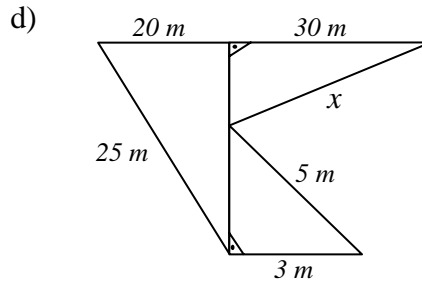
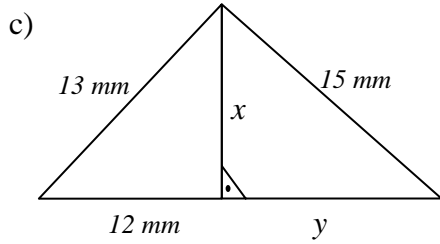
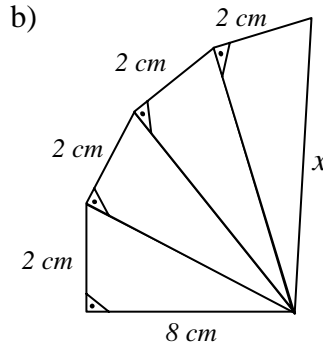
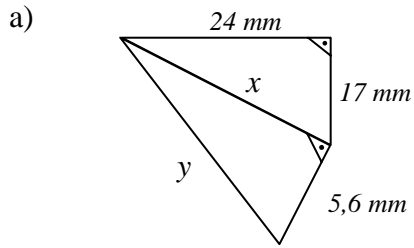
Exercice 1 :

Calculer la longueur inconnue des triangles représentés sur les croquis ci-dessous :



Exercice 2 :

Calculer les longueurs inconnues sur les **croquis** ci-dessous :



Réponses :

Ex 1:

a) $x = 20 \text{ cm}$

d) $x = 16,62 \text{ mm}$

b) $x = 16,26 \text{ mm}$

e) $x = 9,74 \text{ m}$

c) $x = 4,95 \text{ cm}$

f) $x = 13,91 \text{ dm}$

Ex. 2

a) $x = 29,41 \text{ mm}$; $y = 29,94 \text{ mm}$

d) $x = 31,95 \text{ m}$

b) $x = 8,95 \text{ cm}$

e) $x = 18 \text{ dm}$; $y = 24 \text{ dm}$

c) $x = 5 \text{ mm}$; $y = 14,14 \text{ mm}$

f) $x = 20,98 \text{ cm}$