

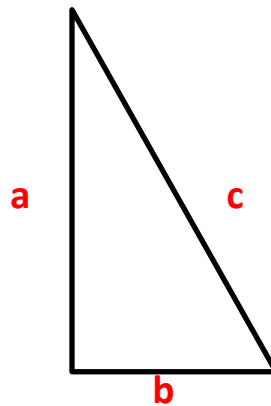
# Pythagore

$$a^2 + b^2 = c^2$$

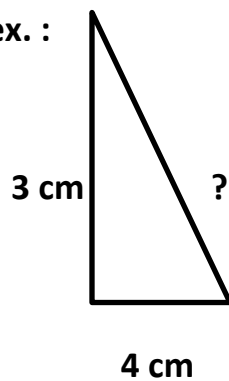
**a et b = cathètes**

**c = hypoténuse**

(côté le plus long)



ex. :



$$a^2 + b^2 = c^2$$

$$3^2 + 4^2 = c^2$$

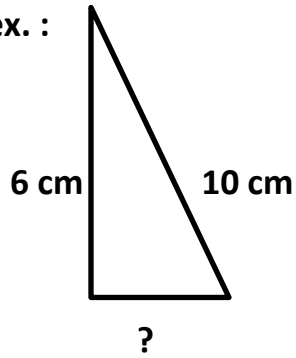
$$9 + 16 = c^2$$

$$25 = c^2$$

$$\sqrt{25} = c$$

$$5 = c \quad \text{rép. : 5 cm}$$

ex. :



$$a^2 + b^2 = c^2$$

$$6^2 + b^2 = 10^2$$

$$36 + b^2 = 10^2$$

$$36 + b^2 = 100$$

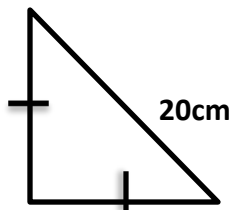
$$b^2 = 100 - 36$$

$$b^2 = 64$$

$$b = \sqrt{64}$$

$$b = 8 \quad \text{rép. : 8 cm}$$

ex. :



$$a^2 + a^2 = c^2$$

$$2a^2 = 20^2$$

$$2a^2 = 400$$

$$a^2 = 400 \div 2$$

$$a^2 = 200$$

$$a = \sqrt{200}$$

$$a = 14,14 \quad \text{rép. : 14,14 cm}$$

Angle 30° : Le côté opposé (en face) à l'angle de 30° = ½ hypoténuse

**\*\*\* La somme des angles d'un triangle = 180° \*\*\***