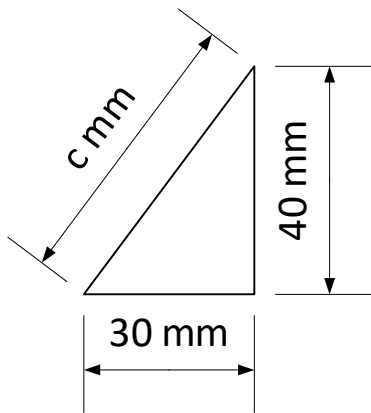


## Pythagoras Theorem

### Example 1

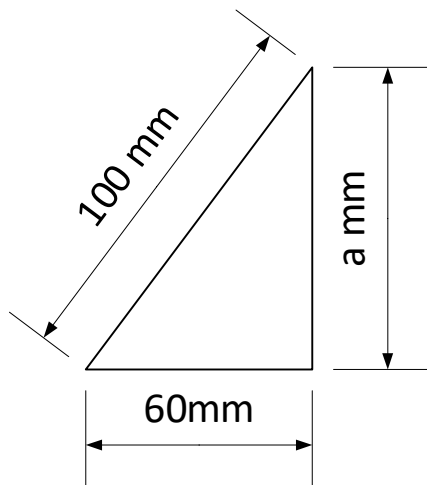


By Pythagoras' Theorem,

$$\begin{aligned}c^2 &= a^2 + b^2 \\&= 30^2 + 40^2 \\&= 900 + 1600 \\&= 2500\end{aligned}$$

$$\begin{aligned}\therefore c &= \sqrt{2500} \\&= 50\text{mm}\end{aligned}$$

### Example 2



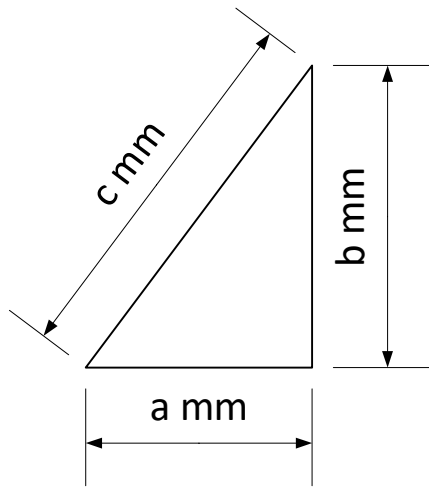
By Pythagoras' Theorem,  $c^2 = a^2 + b^2$

$$\begin{aligned}\therefore a^2 &= c^2 - b^2 \\&= 100^2 - 60^2 \\&= 10000 - 3600 \\&= 6400\end{aligned}$$

$$\begin{aligned}\therefore a &= \sqrt{6400} \\&= 80\text{mm}\end{aligned}$$

## Pythagoras Theorem

### Example 1



By Pythagoras' Theorem,

$$c^2 = \underline{\quad}^2 + \underline{\quad}^2$$

$$= \underline{\quad}^2 + \underline{\quad}^2$$

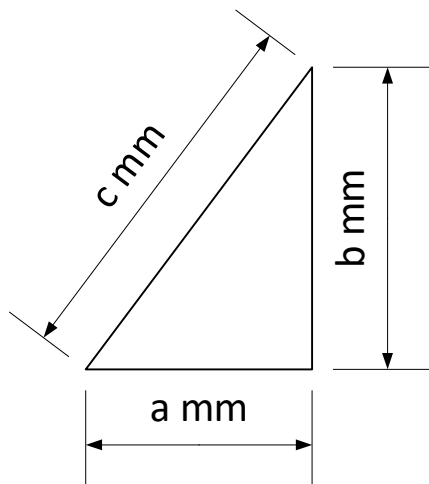
$$= \underline{\quad} + \underline{\quad}$$

$$= \underline{\quad}$$

$$\therefore c = \sqrt{\underline{\quad}}$$

$$= \underline{\quad} \text{ mm}$$

### Example 2



By Pythagoras' Theorem,  $c^2 = a^2 + b^2$

$$\therefore a^2 = c^2 - b^2$$

$$= \underline{\quad}^2 - \underline{\quad}^2$$

$$= \underline{\quad} - \underline{\quad}$$

$$= \underline{\quad}$$

$$\therefore a = \sqrt{\underline{\quad}}$$

$$= \underline{\quad} \text{ mm}$$