

Task # 1: Find the hypotenuse of a random right angle triangle

Using the tiles in the Atrium and a meter stick, you will measure two legs of a right angle triangle of your choice. Draw a diagram of your triangle below and label it with your measurements (in cm):

Measure the triangle's hypotenuse and add it to the diagram above. Enter the value of the **actual** hypotenuse to a tenth of a cm.

Actual Hypotenuse = _____

Use the leg measurements above to determine the value of the **theoretical** hypotenuse below algebraically.

Theoretical Hypotenuse = _____

Find out how accurate you are by making the following error calculation:

$$\% \text{ error} = \frac{\textit{Theoretical} - \textit{Actual}}{\textit{Theoretical}} \times 100\%$$

Task # 2: Find the leg length of a random right angle triangle

Using the tiles in the Atrium and a meter stick, you will measure one leg and the hypotenuse of a right angle triangle of your choice. It must be different from task #1. Draw a diagram of your triangle below and label it with your measurements (in cm):

Measure the triangle's other leg and add it to the diagram above. Enter the value of the **actual** leg to a tenth of a cm.

Actual Leg = _____

Use the initial leg and hypotenuse measurements above to determine the value of the **theoretical** leg below algebraically.

Theoretical Leg = _____

Find out how accurate you are by making the following error calculation:

$$\% \text{ error} = \frac{\textit{Theoretical} - \textit{Actual}}{\textit{Theoretical}} \times 100\%$$