

C++ Program 1: Pythagorean Theorem

Problem Statement: To Calculate the Pythagorean Theorem with the user entering Side A and B (Legs of the Triangle) of a Triangle and the program calculates and outputs Side C (Hypotenuse) of the Triangle.

Directions: Provide the following output/input for the user to follow and the final answer statement

//Include Libraries

```
#include <iostream>
```

```
#include < math.h>
```

```
using namespace std;
```

Declare Variables: A, B, and C // What type of variables will these be? double (real number) or int (integer/whole number)

Output: Pythagorean Theorem Calculator

Output: Blank Line (endl or \n)

Output: User Enter Side A of Triangle:

Input: User enters Side A

Output: Blank Line (endl or \n)

Output: User Enter Side B of Triangle

Input: User Enters Side B

Output: Blank Line (endl or \n)

Calculate Pythagorean Theorem.

NOTE: Consider the following

- Variable A, B, and C will they be Real numbers (variable type: double) or Integers (variable type: int) when declared
- Use Parentheses () when calculating the power of a and b
- Square root Write Code as: $c = \sqrt{\text{variable } c}$

Output: Side C of Triangle is: "OUTPUT VALUE OF C" // this should be on all one line.

Submission: Show Teacher final program output

Print a copy of the final code to turn in