

C++ FUNCTIONS: PYRAMID CALCULATOR

Create a pyramid calculator using functions

User Requirements

The user wants you to create a pyramid calculator. The user will enter the values for length, width and height in order to calculate the surface area and volume of the pyramid.


Right rectangular pyramid
Solve for surface area ▾

$$A = lw + l\sqrt{\left(\frac{w}{2}\right)^2 + h^2} + w\sqrt{\left(\frac{l}{2}\right)^2 + h^2}$$

l Base length

w Base width

h Pyramid height




Right rectangular pyramid
Solve for volume ▾

$$V = \frac{lw h}{3}$$

l Base length

w Base width

h Pyramid height



Software Requirements

Create a flowchart or pseudo code to establish an algorithm of how to solve this problem.

You must create two functions as indicated below.

- calcSurfaceArea
 - this function must receive three double parameters (i.e., length, width, and height)
 - this function must return a double
- calcVolume
 - this function must receive three double parameters (i.e., length, width, and height)
 - this function must return a double

You must use the following input statements:

“Enter the length: “

“Enter the width: “

“Enter the height: “

You output must appear as follows:

“Surface area: xxxxxxxx”

“Volume: yyyyyyyy”