//area volume

//Computes the area of a circle and the volume of a sphere.

//Uses the same radius for both calculations.

#include <iostream>

#include <cmath>

#include <conio.h>

using namespace std;

const double **PI = 3.14159; /\* global named constant declaration;after all include and and using directgives, and before function declarations \*/**

double area(double radius);

//Returns the area of a circle with the specified radius.

double volume(double radius);

//Returns the volume of a sphere with the specified radius.

int main( )

{

double radiusOfBoth, areaOfCircle, volumeOfSphere;

cout << "Enter a radius to use for both a circle\n"

<< "and a sphere (in inches): ";

cin >> radiusOfBoth;

areaOfCircle = area(radiusOfBoth);

volumeOfSphere = volume(radiusOfBoth);

cout << "Radius = " << radiusOfBoth << " inches\n"

<< "Area of circle = " << areaOfCircle

<< " square inches\n"

<< "Volume of sphere = " << volumeOfSphere

<< " cubic inches\n";

\_getch();

return 0;

}

double area(double radius)

{

return (**PI** \* pow(radius, 2)); **/\*global PI available in function definition \*/**

}

double volume(double radius)

{

return ((4.0/3.0) \* **PI** \* pow(radius, 3)); **//global PI**

}