

Include all the programs in *one* source file.

Separate out each problem with a comment indicating the problem number.

Proper commenting, and useful display of output would greatly help in reading your code. Spend time in generating proper input/output commands.

Your source code is to be uploaded to Canvas using `YourName_Assignment2.c` format.

There is **10 points deduction** for not following proper submission structure.

Write a program that given the radius, computes the area and circumference of a circle, as well as the volume of a sphere that is built with that circle.

a) Greet the user to the circle calculator. (5 points)

b) Also ask them to input the radius of the circle, and the name of that circle (one character only). (15 points)

c) Compute the area, circumference and volume of the sphere made with that circle. The equations are as follows (30 points):

$$C = 2\pi r$$

$$A = \pi r^2$$

$$V = \frac{4}{3}\pi r^3$$

d) Display the results back to the user using the `printf` function. Mention the name of that circle in the output. The result should be displayed with 3 decimal places and fully identifiable (20 points).

Note1: All constants must be defined as a constant macro.

Note2: Your calculations must be very accurate. Double check the output of your program for different inputs, and also using your personal calculator to make sure they match.

Note3: Make sure you have a visually appealing output. Use the escape sequences for this purpose.