

In-Class Exercise - Python Built-in Math Modules (Save As: **mathmodule.py**)

INSTRUCTIONS: - Read the statements below and perform the tasks. **Add necessary comments.**

1. Create a Python file save as **mathmodule.py**
2. Given the radius compute the diameter, circumference, and volume of a sphere.
3. Useful facts:

diameter = 2 * radius

circumference = 2 * PI * radius

surface area = 4 * PI * radius * radius

volume = 4/3 * PI * radius * radius * radius

4. **Import** the math module.
5. Use **math.pi** in your calculations.
6. Write a program that takes the radius of a sphere (a floating pointing number) as input (use a descriptive prompt).
7. Output the sphere's diameter, circumference, surface area, and volume (use a descriptive output).