

COP1000: Use a switch case for your solution.

Due: 2/2

### **Geometry Calculator**

Write a program that displays the following menu:

Geometry Calculator

1. Calculate the Area of a Circle
2. Calculate the Area of a Rectangle
3. Calculate the Area of a Triangle
4. Quit

Enter your choice (1-4):

If the user enters 1, the program should ask for the radius of the circle and then display its area. Use 3.14159 for  $\pi$ . If the user enters 2, the program should ask for the length and width of the rectangle, and then display the rectangle's area. If the user enters 3, the program should ask for the length of the triangle's base and its height, and then display its area. If the user enters 4, the program should end.

*Input Validation: Decide how the program should handle an illegal input for the menu choice or a negative value for any of the other inputs.*