CSCI-14 programming problem #1. (20 points) Due 2/1/18

Write a C++ program that prompts the user for the radius (r) of a circle, and then calculates and prints the user's entry, the diameter, the circumference and the area of the circle with appropriate text. The formula for diameter is 2r, for area is πr^2, and for circumference is $2\pi r$. Use a named constant with the value 3.14159 for π. Test with several values for the radius. You may assume the user will enter small non-negative values for the length of the radius. Check with at least the following radius values: 0, 0.5, 1.0, 1.5 and 2.5. Check the results of a few tests by hand and send me them in a separate text file.

Email me the source file and text files containing your test results and test notes. Attach the source and output files (as plain text files, and C++ .cpp source files ARE plain text files). Do not send me Word .doc, .docx or .rtf files or PDF files, or change the extension .cpp to .txt.

Name the source, output and explanation files in a way that tells me which file is which before I open them.