Name:

Do your work in this directory:

/data/courses/ece\_1111/current/quizzes/qu\_03/lastname\_firstname

1. (50 pts) The following program:

/data/courses/ece\_1111/current/quizzes/qu\_03/picone\_joseph/example.cc

should produce a value of 0 for the difference. But when I run it, I observe the following:

ece-000\_[2]: example.exe 0

input: 0.000000; output = 0.000000; difference is 0.000000

ece-000\_[2]: example.exe 1

input: 1.000000; output = 1.000000; difference is 0.000000

ece-000\_[2]: example.exe 10

input: 10.000000; output = 10.000000; difference is 0.000000

ece-000\_[2]: example.exe 100

input: 100.000000; output = 100.000000; difference is 0.000000

ece-000\_[2]: example.exe 1000

input: 1000.000000; output = -24.000000; difference is -1024.000000

ece-000\_[2]: example.exe 100000

input: 100000.000000; output = -96.000000; difference is -100096.000000

In a file p01.txt, explain why it produces a zero value some of the time, but not all the time. How would you fix this?

1. (50 pts) Write a program named p02.cc that adds three numbers from the command line and prints the sum exactly as shown:

ece-000\_[2]: p02.exe 27.00 10.0 10.0

sum: 27.0000 + 10.0000 + 10.0000 = 47.0000

ece-000\_[2]: p02.exe -1 0.001 1.0

sum: -1.0000 + 0.0010 + 1.0000 = 0.0010

Your output should match the output above exactly – meaning every character should line up. Use the test cases above to verify your code.

Submit your code in the usual format – Makefile, header file and source code file. Any submissions missing these things will get a zero.