Assignment Two

Due Wednesday, October 23, 7:00 pm.

[1.] Write a code to compute $\int_1^4 x^3 \mathrm{d}x$ using the trapezoidal rule. Print it and hand it in.

[2.] Run your code for $N = 4, 16, 64, 256$ divisions of the interval, and compare with the exact answer.

[3.] Write a code to compute $\int_1^4 e^x \sqrt{x} \ \log x \ \mathrm{d}x$ using the trapezoidal rule. Print it and hand it in.

[4.] Run your code for $N = 4, 16, 64, 256$ divisions of the interval. Can you compute the exact answer?