MATH 371-03 (181)
HW # 5
Due Oct. 28, 2018

Q1. Use Simpson's Rule to approximate

$$\int_1^{1.5} x^2 \ln x dx$$

and find a bound for the error.

Q2. Consider the following quadrature formula:

$$\int_{-1}^{1} f(x)dx = af(-1) + bf(1) + cf'(-1) + df'(1)$$

Determine the constants a, b, c and d such that this formula has degree of precision 3.