Math 1120 Homework Assignment #1
Due week of September 2

You should do the problems from the book first and check your answers to be sure you understand the methods.

Book problems:

Section 5.4  #5, 9, 19, 25, 37, 41, 43

Section 5.5  #5, 7, 13, 19, 29, 39, 43

Hand-in problems:

Section 5.4  28, 34, 48, 65-68, 69-70, 78

Section 5.5  44, 48

A Evaluate \( \int_0^1 (\sin x + \cos x) \, dx \).

B Evaluate \( \int_0^1 (x^2 + 1)^2 \, dx \).

C Find \( \frac{dy}{dx} \) for \( y = \int_x^1 \sqrt{t^4 + 7} \, dt \).

D Find \( \frac{dy}{dx} \) for \( y = \int_0^1 e^{t^2} \, dt \).