Math 1120 Homework Assignment #5
due week of September 30

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

Book problems:

Section 8.3   #7, 11, 15, 19, 29, 31, 56, 58
Section 8.4   #9, 11, 17, 19, 21, 25, 29, 35, 40, 60

Hand-in problems:

Section 8.3   14, 20, 44, 56
Section 8.4   6, 8, 28, 30, 40

A Evaluate \( \int \frac{1}{(x^2-1)^{3/2}} \, dx \), \( x > 1 \).

B Find the area enclosed by the ellipse \( x^2 + 4y^2 = 16 \).

C Evaluate \( \int \frac{x^4}{(x+1)(x-2)} \, dx \).

D Evaluate \( \int \frac{2x}{(4x^2+1)(4x^2-1)} \, dx \).