Math 1120 Homework Assignment 5

Due week of March 2, 2018

You should do the problems from the book first and check your answers to
be sure you understand the methods. You are responsible for all problems.
Hand-in starred problems only.

§8.3  7, 11, 14*, 15, 19, 20*, 29, 31, 44*, 56
§8.4  8*, 9, 11, 17, 19, 21, 25, 29, 30*, 35, 40
§8.5  10, 18*, 27, 28, 33, 34*, 37

Other problems:

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