

Homework 1

The work handed in should be entirely your own. You can consult Stewart's *Calculus* and the class notes but nothing else. Due Sept. 11.

1. Find the integrals

(1). $\int \frac{x+2}{\sqrt{x^2+4x}} dx.$

(2). $\int e^x \cos(e^x) dx.$

(3). $\int \frac{\sin x}{1 + \cos^2 x} dx.$

(4). $\int_0^2 \frac{dx}{(1 + \sqrt{x})^4}$

(5). $\int_0^1 x^2 \sqrt{2+x} dx$

2. Exercises 1, 4, 8, 18, 20, 28, 37, 42, 47, 51, 55. 70 of Section 7.1.

3. Exercises 1, 2, 6, 12, 16, 18, 30, 50, 53, 70 of Section 7.2