

Homework Assignment for Week 01

1. Section 8.7: Do as many as you can the odd number problems in problem 35-65.

2. Section 8.7: Evaluate

$$\int_0^1 \frac{1}{x^p} dx = \lim_{\varepsilon \rightarrow 0} \int_{\varepsilon}^1 \frac{1}{x^p} dx$$

for $0 < p < 1$, $p = 1$ and $p > 1$ respectively.

3. Section 10.3: Problems 27, 31, 33, 37, 53, 55.