(a) Read Chapter 18 of Thompson. Its title is ‘integrating as the reverse of differentiating’. Summarize the chapter, with particular attention to how Thompson is addressing the topic of his title.

(b) What is the comparison test? Explain why it works.

(c) What is the limit comparison test? Explain (roughly) why it works.

(d) 11.4, 3-16. For those series which converge in problems 3-10, determine an explicit upper bound for the value of the series.

(e) 11.5, 2-6, 23-30, 32, 33.

Additional problems: 11.4, 17-22, 11.5, 7-12 (subject to same instructions as above)
Bonus: Which of the convergence tests we have studied so far do you believe is best for which kind of integrals? Explain thoroughly.