This week on the problem set you will get practice with improper integrals and we will also start to think about sequences and their convergence. Starred questions are usually (though not always) more difficult and/or not suitable for exams however are well worth thinking about!

The questions have been taken from the textbook:

- J. Rogawski, C. Adams, *Calculus, Single Variable*, 3<sup>rd</sup> Ed., W. H. Freeman & Company, and refer to the section and question number in the textbook.
- $1. \ (\text{Section } 8.7) \ 1, \ 6, \ 12, \ 14, \ 18, \ 22, \ 25, \ 31, \ 32, \ 35, \ 36, \ 37, \ 38, \ 41, \ 45, \ 47, \ 49, \ 54, \ 58, \ 63, \ 64, \ 67, \ 72, \ 101^*.$
- 2. (Section 11.1) 14, 17, 20, 23, 26, 27, 29.