This week on the problem set we will practice taking derivatives and integrals involving inverse and hyperbolic trig functions. We will also see some exercises on the basics of Taylor polynomials. Starred questions are usually (though not always) more difficult not suitable for exams however are well worth thinking about!

The questions have been taken from the textbook:

- J. Rogawski, C. Adams, Calculus,  $Single\ Variable$ ,  $3^{\rm rd}$  Ed., W. H. Freeman & Company, and refer to the section and question number in the textbook.
- $1. \ (\mathrm{Section}\ 7.8)\ 5,\ 7,\ 8,\ 9,\ 12,\ 13,\ 17,\ 20,\ 35,\ 36,\ 38,\ 42,\ 47,\ 61,\ 65,\ 66,\ 70,\ 111,\ 113.$
- 2. (Section 7.9) 9, 12, 14, 17, 22, 26, 27, 35, 37, 41, 43, 51, 55, 61, 64, 73\*.
- 3. (Section 9.4) 2, 4, 5, 9, 14, 15, 19, 23, 61\*.