Calculus I, Fall 2023 (http://www.math.nthu.edu.tw/~wangwc/)

## Homework 03

1. Section 2.5: problems 37, 64(\*), 67, 68(\*), 77 (Need not graph it).

Hint for problem 37: Theorem 10.

Remark: optionally, you can hand in problems with (\*) by Oct 05 in class for reviews and corrections.

2. Section 2.6: problems 29, 53, 61, 85, 92, 93(\*), 95(\*), 97.

Remark: optionally, you can hand in problems with (\*) by Oct 05 in class for reviews and corrections.

3. Study definition of the limits in p102, p119, p125 and p131. How would you define the four limits

$$\lim_{x \to \pm \infty} f(x) = \pm \infty?$$

Verify the statement

$$\lim_{x \to \infty} -x^3 = -\infty$$

using the definition you wrote.