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

## Homework 11 (updated)

1. Section 5.3: Read Table 5.6.
2. Section 5.3: problems 5, 13, 17, 49, 71, 73.
3. Section 5.4: Problems 3, 7, 11, 15, 17, 25, 27, 31, 33, 34, 36, 77, 81, 84, 89.
4. Section 5.5: problems $15,16,35,41,43,53,57,58,59,60,61,67,69$.

Hints:
Problem 41: the integrand $=x^{-4} \sqrt{1-3 x^{-3}}$.
Problem 43: $x=(x-1)+1$.
Problem 57, 60: see a similar problem in lecture 19.
Problem 58: the integrand $=\frac{x}{x^{2} \sqrt{x^{4}-1}}$.
5. Section 5.6: problems 2, 33, 45, 112, 115, 117.
6. Chap 5, Additional and Advanced Exercises: problems 5, 21, 22, 24, 31.

