# INTRODUCTION TO HIGHER MATHEMATICS V2000

**General rules for homework.**
- Cooperation with others is OK, copying from others is not.
- Put your name on each page and submit all pages attached.
- Homework will be graded and will count for 30% of the final grade.
- Late homework will be penalized, unless the student has a valid excuse.
- Students may resubmit revised homework for regrading, and either the original grade or the average of the two grades (whichever is higher) will be recorded.

### Homework, week 1, due September 15

From Dumas, McCarthy, Second Edition, Ch 1.

Exercises 1.1; 1.2 part (i); 1.4 (parts ii, iii, v); 1.7; 1.10 (parts i, iii,v); 1.15; 1.16 (iii), (iv); 1.19 (i)-(iii).

Note for Exercise 1.10: Exponentiation on a set $X$ of numbers is the operation $X \times X \to X$ given by $(m, n) \mapsto m^n$, which denotes m to the power n. Thus (2,4) goes to $2^4 = 16$.

**Optional problems.** Exercises 1.8, 1.20, 1.21.