# MATH 340 Assignment 1, Fall 2017 

Michael Monagan

This assignment is to be handed in on Monday September 18th.
Please hand in to dropoff box \#6 outside AQ 4115 by 11:20am.
Late penalty: $-20 \%$ for up to 24 hours late. Zero for more than 24 hours late.

## Section 1.1: Sets, Functions, Numbers

Read Section 1.1 and especially the argument on page 12 that says: a function $f$ is bijective if and only if it has in inverse.

Exercises 6-9, 10-12, 15-16, 19 from the text.

## Section 1.2: Induction

Exercises 4, 7. Please pay attention to how you write your proofs.

## Section 1.3: Divisibility

Exercises 2, 6, 13 (i) \& (ii), 14, 15 and 18.
For exercise 6, use induction on $n$.
For exercise 13 create tables like the one shown for Example 1.3.7 on page 23.

