

# Homework 2

## Homework Maths 2

1. Modular arithmetic - you just need to find examples, you don't need to prove anything.
  - a) Is it true that all odd squares are  $\equiv 1 \pmod{8}$  ?
  - b) what about even squares  $\pmod{8}$  ?
2. What do you understand by
  - a)  $O(n)$
  - b)  $O(1)$
  - c)  $O(\log n)$

For a proof size, which of these would you want ?