18.702 Problem Set 4

due Friday, March 11

- 1. Chapter 11, Exercise M.7 (maximal ideals in the ring of functions)
- 2. Chapter 12, Exc. 2.8. (division with remainder in $\mathbb{Z}[i]$)
- 3. Chapter 12, Exc. 5.4. (primes in $\mathbb{Z}[i])$
- 4. Chapter 12, Exercise M.2 (factoring in an additive semigroup)
- 5. Chapter 12, Exercise 4.10 b,d,e (factoring polynomials. Do not use the computer!)

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