April 3, 2021

18.702 Problem Set 7

due Wednesday, April 14

1. Chapter 13, Exercise 7.3. (*some norms with* $d = -26$)

2. Determine the ideal class group in the ring of integers $R = \mathbb{Z}[\delta]$ when $\delta^2 = d$, with **(a)** $d = -37$, and **(b)** $d = -41$.

3. Chapter 13, Exercise 8.4. (*the cases of unique factorization*)

4. Chapter 14, Problem 1.4. (*Schur's Lemma*)

5. Chapter 14, Problem 4.5. (*lattices in the complex plane*)