
Math 5362 - Algebraic Number Theory

Homework 6

Due - Sunday 26 April 2020 11:59pm

1. Determine the fundamental unit of \mathcal{O}_K for

(a) $K = \mathbb{Q}[\sqrt{2}]$;

(b) $K = \mathbb{Q}[\sqrt{3}]$;

(c) $K = \mathbb{Q}[\sqrt{5}]$; and

(d) $K = \mathbb{Q}[\sqrt{6}]$.

2. Prove Theorem 7.14