Math 530: Problem Set 3

1. Marcus, Chapter 2, Problem 33.

2. Marcus, Chapter 2, Problem 35.

3. Marcus, Chapter 3, Problem 9.

4. Marcus, Chapter 3, Problem 11.

5. Marcus, Chapter 3, Problem 12, with the addition of:

    Part (f): What are the norms of the two ideals $(\alpha + 2)$ and $(5, \alpha^2 + 3\alpha - 1)$? Which of them are prime?

6. Marcus, Chapter 3, Problem 13.