

Math 331 Spring 2006
Assignment 9: Due by April 10

1. Let G be a group with order 10. Prove or disprove this is not a simple group.
2. Let G is a group with $G/Z(G)$ is cyclic. Show that G is abelian.
3. Show that

$$F = \{a + \sqrt{3}b \mid a, b \in \mathbb{Q}\}$$

is a field.