

Math 113 Homework # 5, due 10/14/9 at 8:10 AM

1. Fraleigh section 10 exercises 34, 39, 40.
2. Fraleigh section 11 exercises 6, 20, 46.
3. (a) Use the fundamental theorem of finitely generated abelian groups to list all abelian groups of order 16, up to isomorphism.
(b) Show directly (without using the fundamental theorem) that none of these groups is isomorphic to any of the others.
4. Fraleigh section 13, exercises 4, 5, 8, 9, 24, 32, 44, 49, 52.
5. How challenging did you find this assignment? How long did it take?