

MA535 ALGEBRA
W. J. Martin
September 22, 2015

Assignment 3

DUE DATE: Tuesday, September 29 at the beginning of class.

Please recall and observe Dr. Martin's assignment presentation rules for algebra assignments.

Provide neat and careful solutions to the following five problems:

1. Say that a group G is *semi-commutative* if G contains an abelian normal subgroup N for which the factor group G/N is also abelian. Prove that every subgroup of a semi-commutative group is again semi-commutative.
2. Exercise 3 on p101
3. Exercise 17 on p147
4. Exercise 21 on p147
5. Exercise 32 on p147

IMPORTANT NOTE: In this course, you are not permitted to search the internet for solutions to homework problems. Any internet search with the intent to find solutions to homework problems is a form of academic dishonesty. Please have some self-respect and do not cheat.