

UH - Math 7350 - Dr. Heier - Spring 2012

HW 3

Due 03/20/12, at the beginning of class.

Use regular sheets of paper, stapled together.

Don't forget to write your name on page 1.

1. (1 point) Prove that the kernel and image of a Lie algebra homomorphism are Lie subalgebras.
2. (1 point) Problem 4-11 (page 101)
3. (2 points) Problem 4-15 (page 102)
4. (2 points) Problem 4-16 (page 102)
5. (2 points) Problem 4-18 (page 102)
6. (1 point) Problem 5-1 (page 121)
7. (1 point) Problem 6-1(a) (page 151)