

MATH 342 SECTION 33650
WRITTEN HOMEWORK 8
DUE MAY 23, 2016.
INSTRUCTOR: ROBERT LIPSHITZ

Required textbook problems (hand these in):

- (1) §7.1: 2, 4, 8, 10, 14, 17.
- (2) §7.2: 1, 4, 10.
- (3) §7.3: 2, 4.

Suggested practice (don't hand these in):

- Please read and make sure you can do the practice problems in Sections 7.1, 7.2, and 7.3.
- Use Exercise 7.1.25, 7.1.26, 7.2.21, 7.2.22, for review.
- If you had trouble or got help with any of the assigned problems, solve another, similar problem (or two).

Bonus points. None this week. Sage has a huge amount of code related to quadratic forms (see http://doc.sagemath.org/html/en/reference/quadratic_forms/) but it's focused on number theory, and not well suited to what we've been studying. (Over $\mathbb{Z}$, quadratic forms are very complicated; over $\mathbb{R}$, they are simple. We are working over $\mathbb{R}$ in this course.) You already know how to use Sage to do the computations for this week.

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