

Math 115. Homework 13

Do not hand in. Solutions will be posted on bCourses on December 12.

Section 7.5 (Page 340): 3, 4, 6

Additional problem #1

Prove the “stronger inequality” of Theorem 7.12 using the second assertion of Theorem 7.13 (instead of the method given in the book’s proof of Theorem 7.12).

Possible erratum for Exercise 7.5.3

If you are using an older version of the textbook, please see the errata linked at the top of the course web page.

Section 7.7 (Page 351): 1, 2.

Additional problem #2

Expand $\sqrt{14}$ into an infinite simple continued fraction.

Additional problem #3

In the proof of Theorem 7.21, show that $q_i > 0$ for all i .

Section 7.8 (Page 356): 2, 4, 5, 7, 13.