Honors Algebra II, Courant Institute, Spring 2021

 $http://www.math.nyu.edu/faculty/goodman/teaching/HonorsAlgebra II 2021/HonorsAlgebra II.html \\ Check the class forum for corrections and hints$

Assignment 9, due April 13 (before class starts).

Instructions

- Do not hand in a rough draft. Copy or type answers neatly and clearly. Points may be deducted for writing that is sloppy, has excessive cross-outs, or is hard to read.
- State facts precisely in clear language or notation. Put assertions in logical order. State clearly what the hypotheses and conclusions. Put the steps of an argument in logical order, including definitions. Points may be deducted for an incorrectly stated argument even if you seen to understand it. Clear mathematical exposition is an important goal for the class.
- Learn the Greek letters used in math. Learn their mathematical names and write them clearly.

Assigned Exercises, to hand in

- 1. Exercise M1 from Chapter 15.
- 2. Exercise M2 from Chapter 15. Hint. look for roots.
- 3. Exercise M3 from Chapter 15.
- 4. Exercise 7.1 from Chapter 16. *Notice*. This is almost the same as the exercise we did with i and $\sqrt{2}$, but more general and systematic.
- 5. Exercise 7.3 from Chapter 16
- 6. Exercise 7.5 from Chapter 16