

Reading/Blogging Assignments

Come to class on

- Monday having read and blogged on section 1.8
- Wednesday having read and blogged on the first part of 2.1 (up to ideals)
- Friday having read and blogged on the rest of 2.1

Problem Set 3, Due September 17

Feel free to do some experimentation via a computer algebra system to develop intuition for the problem.

1. We saw that in general the quintic and any polynomial of larger degree can be solved in radicals. Sometimes they can:
 - Show that the polynomial $x^6 + ax^5 + bx^4 + cx^3 + bx^2 + ax + 1$ can be solved in radicals.
 - Show that the polynomial $x^5 - 1$ can be solved in radicals. In particular, show that the fifth roots of unity can be expressed as radicals.
2. Problem 2 at the end of Chapter 2.
3. Problem 4 at the end of Chapter 2.