

Review for Test 2

You need to know all definitions and facts listed below. You also need to know proofs of some proofs “(with proof)”. Please also review homework problems, quizzes, and examples from class.

1. Chapter 7. Polynomial equations. Definitions of a polynomial equation and of a root. Fundamental Theorem of Algebra. Theorem 7.2. Theorem 7.3. Proposition 7.1.
2. Chapter 8. Induction. Principle of mathematical induction. Principle of strong mathematical induction. Proposition 8.1 (with proof).
3. Inequalities. Proposition 8.2 (Cauchy inequality, with proof). Inequalities between arithmetic and geometric means (with proof from class).

Good luck!