

Honors Math Analysis Guide

Chapter 4: Polynomial and Rational Functions

Date	Section/Topic	Homework (odds in sequences, unless otherwise noted)
10/10	4-1: Power functions; polynomials – zeros, multiplicity and end behavior	15-26 all, 27, 33, 37, 45, 47, 49-59, 61-64 all, 67, 69, 73, 77, 83
10/11	4-1: Analyzing graphs; cubic fit; applications	87, 91, 93, 95, 99, 105, 107, 109, 111
10/14	4-2: Real zeros of polynomials; remainder theorem, factor theorem, Decartes' rule of signs	11-31
10/15	4-2: Rational zeros theorem, synthetic division, monster polynomials	33-69 eoo, 73-77
10/16 (PSAT - short period)	4-2: Monster polynomials – Intermediate Value Theorem	79, 83, 87, 89, 91, 93, 101, 103
10/17 (shake-out)	4-2: Monster polys 4-3: Complex zeros, conjugate pairs	Homework continued from last night – we'll see how much time we have with the two shortened periods and may or may not get started on section 4-3
10/18	4-3: Complex zeros, conjugate pairs	7-21
10/21	4-3: Complex zeros, conjugate pairs	23-39
10/22	4-4: Rational functions – domain and asymptotes	13-39 (use graph paper for 31-39)
10/23	4-4: Rational functions – horizontal, vertical and oblique asymptotes	43-57 Homework 4-1, 4-2 and 4-3 due QUIZ
10/24	4-5: Graphing rational functions	7-43 eoo
10/25	Minimum Day (TBA)	End of Q1
10/28	4-5: Holes & asymptotes, applications	45-55, 61 PROJECT DUE
10/29	4-6: Polynomial and rational inequalities	5-17, 19-47 eoo, 55, 57, 61, 65, 67, 71, 77, 79
10/30	Review	Tech Quiz
10/31	Chapter 4 Test	Homework 4-4, 4-5 and 4-6 due