

Chapter 4: Quadratic Functions and Rational Expressions

Chapter Overview Chart

*SUGGESTED TIMING Functions and Relations: 17 h 30 min Functions: 20 h				
Section	Timing (min)		Materials/ Technology	Expectations
	Functions and Relations	Functions		
4.1 Skill Builder: Extending Algebra Skills: Completing the Square, page 304	75	75	GC	OC1.03
4.2 Maximum and Minimum Values of Quadratic Functions, page 308	75	150	GC	OC1.03
4.3 Zeros of Quadratic Functions, page 318	75	105	GC or GS	OC1.05
4.4 Introducing Complex Numbers, page 328	75	75	GC	OC1.04, OC1.05
4.5U Skill Builder: Adding, Subtracting, and Multiplying Complex Numbers, page 334	75			OC1.04 OC1.06U
4.6 Reciprocal Functions, page 338	75	75	GC	OC2.03, OC2.04, OC2.05
4.7 Exploration: Exploring the Behaviour of Functions Near Asymptotes, page 349	30	30	GC	OC2.03
4.8 Simplifying Rational Expressions, page 351	75	75	GC software that allows manipulation of rational expressions (optional)	OC1.07U
4.9 Multiplying and Dividing Rational Expressions, page 356	150	75		OC1.07U
4.10U Skill Builder: Dividing Complex Numbers, p. 361		75		OC1.04, 1.06U
4.11 Adding and Subtracting Rational Expressions, page 364	150	75	notepaper	OC1.07U
4.12 Skill Builder: Extending Algebra Skills: Working with Polynomials, page 372	75	75	chart paper and markers (optional) overhead transparencies and markers (optional)	OC1.02
BLM = Blackline Masters GP = Graph Paper SC = Scientific Calculator CBR/L = Calculator-Based Ranger/Laboratory GS = Graphing Software SS = Spreadsheet Software GSP = <i>The Geometer's Sketchpad</i> GC = Graphing Calculator *Suggested Timing includes time for preview, additional activities, review, and assessment.				
Check Your Understanding: Answers, p. 4-57 The Chapter Problem Questions and Solutions, p. 4-62 Challenge 1 – Solution Guide and Rubric, p. 4-68 Challenge 2 – Solution Guide and Rubric, p. 4-72 Chapter 4 Test and Solutions, p. 4-75				