

CONTENTS

To the Student	xiii
To the Instructor	xv

INTRODUCTION	10
--------------	----

Section 1 Getting Warmmed Up for Algebra	20
--	----

BLOCK 1 SOLVING FIRST-DEGREE EQUATIONS

Section 2 Looking for the Unknown	12
Section 3 Adding and Subtracting to Solve Equations	15
Section 4 Multiplying and Dividing to Solve Equations	20
Section 5 Making Equations	30
Section 6 Solving Messier Equations	33
Section 7 Formulas	39
Section 8 Ratio and Proportion	47
Section 9 Percent	51
Exercises for Section 2	59
Exercises for Section 3	61
Exercises for Section 4	63
Exercises for Section 5	65
Exercises for Section 6	67
Exercises for Section 7	71
Exercises for Section 8	73
Exercises for Section 9	75
Skill Builder for Block 1	79
Answers	82
Test for Block 1	83

BLOCK 2 POLYNOMIALS

Section 10 Polynomials	88
Section 11 Adding and Subtracting Polynomials	97
Section 12 Multiplying First-Degree Polynomials	102
Section 13 Factoring Second-Degree Polynomials	110
Section 14 Further Factoring	121
Section 15 Finding Zeros of Polynomials	127

Section 16	Multiplying Any Two Polynomials	136
Section 17	Dividing Polynomials	141
Section 18	Division, Multiplication, and Fractions	148
Section 19	Division by Higher-Degree Polynomials	155
Exercises for Section 10		161
Exercises for Section 11		165
Exercises for Section 12		169
Exercises for Section 13		173
Exercises for Section 14		177
Exercises for Section 15		181
Exercises for Section 16		185
Exercises for Section 17		189
Exercises for Section 18		191
Exercises for Section 19		193
Skill Builder for Block 2		195
Answers		198
Test for Block 2		199

BLOCK 3 POLYNOMIAL FRACTIONS

Section 20	What Is a Polynomial Fraction?	202
Section 21	Multiplying Polynomial Fractions	208
Section 22	Equivalent Polynomial Fractions	211
Section 23	Adding and Subtracting Polynomial Fractions	216
Section 24	Simplifying Polynomial Fractions	226
Section 25	More Simplifying	232
Section 26	Division of Polynomial Fractions	238
Exercises for Section 20		245
Exercises for Section 21		249
Exercises for Section 22		251
Exercises for Section 23		253
Exercises for Section 24		255
Exercises for Section 25		257
Exercises for Section 26		259
Skill Builder for Block 3		263
Answers		264
Test for Block 3		265

BLOCK 4 GRAPHING

Section 27	Locating Points	268
Section 28	Ordered Pairs from Polynomials	272
Section 29	Graphing Polynomials	275
Section 30	Graphing First-Degree Polynomials	279
Exercises for Section 27		283
Exercises for Section 28		285
Exercises for Section 29		287
Exercises for Section 30		289

Skill Builder for Block 4	291
Answers	292
Test for Block 4	293

BLOCK 5 SQUARE ROOTS

Section 31 Arithmetic of Square Roots	296
Section 32 Quadratic Formula	303
Section 33 Parabolas	309
Section 34 Using Quadratic Equations	315
Section 35 Solving Polynomial-Fraction Equations	319
Exercises for Section 31	329
Exercises for Section 32	331
Exercises for Section 33	333
Exercises for Section 34	335
Exercises for Section 35	337
Skill Builder for Block 5	339
Answers	342
Test for Block 5	343

BLOCK 6 EXPONENTS AND ROOTS

Section 36 Negative Exponents	346
Section 37 Fractional Exponents	353
Section 38 More Work with Exponents	359
Exercises for Section 36	365
Exercises for Section 37	367
Exercises for Section 38	369
Skill Builder for Block 6	371
Answers	373
Test for Block 6	375

BLOCK 7 PAIRS OF LINEAR EQUATIONS

Section 39 Graphing Linear Equations	378
Section 40 Pairs of Linear Equations	382
Section 41 Solving without Graphing	386
Exercises for Section 39	397
Exercises for Section 40	399
Exercises for Section 41	401
Skill Builder for Block 7	403
Answers	405
Test for Block 7	407

BLOCK 8 INEQUALITIES

Section 42 The Arithmetic of Inequalities	410
Section 43 Solving First-Degree Inequalities	417

Section 44 More Inequalities	424
Exercises for Section 42	429
Exercises for Section 43	431
Exercises for Section 44	435
Skill Builder for Block 8	439
Answers	441
Test for Block 8	443

BLOCK 9 BRIEF REVIEW OF ARITHMETIC

Section 45 Positive Integers	446
Section 46 Addition	448
Section 47 Subtraction	454
Section 48 Multiplication	460
Section 49 Division	470
Section 50 Prime Factorization	475
Section 51 Fractions, Multiplying Fractions, Dividing Fractions, and Equivalent Fractions	479
Section 52 Adding and Subtracting Fractions	488
Section 53 Mixed Numbers and Division	493
Section 54 Exponents	497
Section 55 Negative Numbers	504
Section 56 Adding and Subtracting with Negative Numbers	509
Section 57 Multiplying and Dividing with Negatives	514
Section 58 Decimals and Their Sums and Differences	518
Section 59 Multiplying Decimals	521
Section 60 Writing Fractions as Decimals	524
Section 61 Dividing Decimals	530
Exercises for Section 45	533
Exercises for Section 46	535
Test for Sections 45 and 46	539
Exercises for Section 47	541
Test for Section 47	545
Exercises for Section 48	547
Test for Section 48	551
Exercises for Section 49	553
Test for Section 49	557
Exercises for Section 50	559
Test for Section 50	561
Exercises for Section 51	563
Test for Section 51	567
Exercises for Section 52	569
Test for Section 52	571
Exercises for Section 53	573
Test for Section 53	575
Exercises for Section 54	577
Test for Section 54	579

Exercises for Section 55	581
Exercises for Section 56	583
Exercises for Section 57	585
Test for Sections 55, 56, and 57	587
Exercises for Section 58	589
Exercises for Section 59	593
Exercises for Section 60	595
Exercises for Section 61	597
Test for Sections 58, 59, 60, and 61	599
Answers to Odd-Numbered Exercises	601
Pretest	615
Answers to Pretest	619
Index	621