

CONTENTS

Introduction

Student Walk-Through

v

Chapter 1 The Number System

	Chapter 1 Glossary	1
1	Recognize and Compare Irrational Numbers	3
2	Apply Properties of Exponents to Compare Irrational Numbers	15
3	Use Exponents in Large and Small Numbers and in Scientific Notation	27
4	Use Square Roots and Cube Roots	39

Chapter 2 Expressions and Equations

	Chapter 2 Glossary	51
5	Graph Proportional Relationships	53
6	Find Slope and Y -intercept for Similar Right Triangles	65
7	Solve Linear Equations	77
8	Solve Problems Involving Systems of Equations	89

Chapter 3 Functions

Chapter 3 Glossary	102
9 Understand Functions	103
10 Compare Properties of Functions	115
11 Analyze and Sketch Graphs of Functions	127

Chapter 4 Geometry

Chapter 4 Glossary	139
12 Dilate Figures Using Coordinates	142
13 Translate Figures Using Coordinates	154
14 Rotate Figures Using Coordinates	166
15 Reflect Figures Using Coordinates	178
16 Use Angle Relationships with Parallel Lines and Triangles	190
17 Explain the Pythagorean Theorem	202
18 Use the Pythagorean Theorem to Solve Mathematical and Real-World Problems	214

Chapter 5 Statistics and Probability

Chapter 5 Glossary	226
19 Create and Interpret Scatter Plots	227
20 Fit a Straight Line to a Scatter Plot and Determine Slope and Intercept	239