

TABLE OF CONTENTS

Introduction	1
---------------------------	----------

About This Book	2
------------------------------	----------

Kindergarten

Kindergarten Common Core State Standards and Mathematical Practices	4
Counting and Cardinality	5
Operations and Algebraic Thinking	6
Number and Operations in Base Ten	7
Measurement and Data	7
Geometry	9

Grade 1

Grade 1 Common Core State Standards and Mathematical Practices ...	11
Operations and Algebraic Thinking	12
Number and Operations in Base Ten	13
Measurement and Data	15
Geometry	17

Grade 2

Grade 2 Common Core State Standards and Mathematical Practices ...	18
Operations and Algebraic Thinking	19
Number and Operations in Base Ten	20
Measurement and Data	21
Geometry	23

Grade 3

Grade 3 Common Core State Standards and Mathematical Practices ...	24
Operations and Algebraic Thinking	25
Number and Operations in Base Ten	27
Number and Operations—Fractions	29
Measurement and Data	30
Geometry	33

Grade 4

Grade 4 Common Core State Standards and Mathematical Practices ...	34
Operations and Algebraic Thinking	35

Number and Operations in Base Ten	39
---	----

Number and Operations—Fractions	40
---------------------------------------	----

Measurement and Data	42
----------------------------	----

Geometry	45
----------------	----

Grade 5

Grade 5 Common Core State Standards and Mathematical Practices ...	47
Operations and Algebraic Thinking	48
Number and Operations in Base Ten	50
Number and Operations—Fractions	52
Measurement and Data	54
Geometry	57

Grade 6

Grade 6 Common Core State Standards and Mathematical Practices ...	58
Ratios and Proportional Relationships	59
The Number System	62
Expressions and Equations	64
Geometry	66
Statistics and Probability	69

Grade 7

Grade 7 Common Core State Standards and Mathematical Practices ...	70
Ratios and Proportional Relationships	71
The Number System	73
Expressions and Equations	75
Geometry	78
Statistics and Probability	81

Grade 8

Grade 8 Common Core State Standards and Mathematical Practices ...	85
The Number System	86
Expressions and Equations	86
Functions	88
Geometry	90
Statistics and Probability	93

TABLE OF CONTENTS

High School: Number and Quantity

High School Number and Quantity Common Core State Standards and Mathematical Practices	95
The Real Number System	96
Quantities	97
The Complex Number System	98
Vector and Matrix Quantities	99

High School: Algebra

High School Algebra Common Core State Standards and Mathematical Practices	101
Seeing Structure in Expressions	102
Arithmetic with Polynomials and Rational Expressions	103
Creating Equations	104
Reasoning with Equations and Inequalities	105

High School: Functions

High School Functions Common Core State Standards and Mathematical Practices	107
Interpreting Functions	108
Building Functions	110
Linear, Quadratic, and Exponential Models	112
Trigonometric Functions	113

High School: Geometry

High School Geometry Common Core State Standards and Mathematical Practices	114
Congruence	115
Similarity, Right Triangles, and Trigonometry	117
Circles	118
Expressing Geometric Properties with Equations	119
Geometric Measurement and Dimension	120
Modeling with Geometry	121

High School: Statistics and Probability

High School Statistics and Probability Common Core State Standards and Mathematical Practices	123
Interpreting Categorical and Quantitative Data	124
Making Inferences and Justifying Conclusions	126
Conditional Probability and the Rules of Probability	127
Using Probability to Make Decisions	128