## MODULE 1

1.1 Reviewing the Relationship Between ..... 8
Decimal and Common Fractions
1.2 Regrouping Tenths, Hundredths10and Thousandths
1.3 Reading and Writing Decimals ..... 12
1.4 Rounding Thousandths ..... 14
1.5 Rounding Decimal Fractions ..... 16
1.6 Adding Tenths ..... 18
1.7 Adding Hundredths ..... 20
1.8 Adding Tenths and Hundredths ..... 22
1.9 Solving Word Problems Involving ..... 24
Decimal Fractions
1.10 Revising the Partial-Products Strategy ..... 26
for Multiplication
1.11 Revising the Formal Algorithm ..... 28
for Multiplication
1.12 Extending the Formal Algorithm to Multiply ..... 30Two-Digit Numbers by Four-Digit Numbers
MODULE 2
2.1 Using Mental Strategies to Add and Subtract ..... 32Whole Numbers
2.2 Adding and Subtracting Four- and Five-Digit ..... 34
Whole Numbers
2.3 Adding Decimal Fractions ..... 36
2.4 Adding Decimal Fractions (with Regrouping) ..... 38
2.5 Using the Formal Algorithm to Add Two ..... 40Decimal Fractions
2.6 Using a Compensation Strategy ..... 42
to Add Dollars and Cents
2.7 Using a Written Method to Add More ..... 44
Than Two Decimal Fractions
2.8 Estimating Total Cost ..... 46
2.9 Solving Addition Problems Involving ..... 48
Decimal Fractions
2.10 Interpreting Information in Timetables ..... 50
2.11 Using a Timetable Involving 24-Hour Time ..... 52
2.12 Calculating Elapsed Time ..... 54
MODULE 3
3.1 Multiplying Decimal Fractions (Tenths) ..... 56
3.2 Using a Partial-Products Strategy to ..... 58 Multiply Decimal Fractions (Tenths)
3.3 Multiplying Decimal Fractions (Hundredths) ..... 60
3.4 Using a Partial-Products Strategy to ..... 62Multiply Decimal Fractions (Hundredths)
3.5 Multiplying Whole Numbers and Decimal ..... 64
Fractions (Hundredths)
3.6 Identifying Prime and Composite Numbers ..... 66
3.7 Investigating Square Numbers ..... 68
3.8 Investigating Oblong Numbers ..... 70
3.9 Investigating Triangular Numbers ..... 72
3.10 Creating and Interpreting Two-Way Tables ..... 74
3.11 Interpreting Side-by-Side Column Graphs ..... 76
3.12 Comparing Different Displays ..... 78of the Same Data

## MODULE 4

4.1 Subtracting Decimal Fractions ..... 80 (Tenths or Hundredths)
4.2 Subtracting Decimal Fractions ..... 82 (Tenths and Hundredths)
4.3 Using Written Methods to Subtract ..... 84 Decimal Fractions
Tenths (Decomposing Ones) ..... 86
Hundredths (Decomposing Tenths)
4.6 Subtracting Decimal Fractions ..... 90
(Decomposing Multiple Places)
4.7 Consolidating Strategies to Subtract ..... 92
4.8 Calculating Change ..... 94
4.9 Exploring the Relationship Between ..... 96 Kilograms and Grams
4.10 Converting Between Grams and Kilograms ..... 98
4.11 Working with Thousandths of a Kilogram ..... 100
4.12 Solving Multi-Step Word Problems ..... 102 Involving Conversions of Mass
MODULE 5
5.1 Introducing Integers ..... 104
5.2 Working with Integers ..... 106
5.3 Solving Problems Involving Integers ..... 108
5.4 Revising Partitioning to Divide Mentally ..... 110
5.5 Extending Partitioning to Divide Mentally ..... 112
5.6 Using the Formal Division Algorithm ..... 114
(Dividing Before Regrouping)
5.7 Using the Formal Division Algorithm ..... 116
(Regrouping Before Dividing)
5.8 Solving Division Problems ..... 118
Involving Remainders
5.9 Solving Division Problems ..... 120
5.10 Exploring the Relationship Between Metres ..... 122and Millimetres
5.11 Exploring the Relationship Between Metres, ..... 124Centimetres and Millimetres5.12 Solving Word Problems Involving Length126
MODULE 6
6.1 Identifying and Describing ..... 128
Geometric Patterns
6.2 Identifying and Describing Number Patterns ..... 130
6.3 Identifying Relationships Between Two ..... 1326.4 Creating Number Patterns Involving Decimal134
Fractions and Common Fractions
6.5 Using Mental Strategies to Multiply ..... 136Two-Digit Numbers
6.6 Comparing Mental Strategies138
for Multiplication
6.7 Using a Double-and-Halve Strategy ..... 140
to Multiply Dollars and Cents
6.8 Using Multiplication Strategies with ..... 142
Decimal Fractions
6.9 Estimating and Measuring Angles ..... 144
6.10 Examining Angles Around a Point ..... 146
6.11 Exploring Angles in Right Angles ..... 148
and on Straight Lines
6.12 Investigating Vertically Opposite Angles ..... 150

## MODULE 7

7.1 Identifying Equivalent Fractions 152
7.2 Using Multiplication to Find 154

Equivalent Fractions
7.3 Reinforcing Mental Strategies for Finding 156 Equivalent Fractions
7.4 Writing Common Fractions in Their 158 Simplest Form
7.5 Comparing Common Fractions 160 (Related Denominators)
7.6 Ordering Common Fractions 162 (Related Denominators)
7.7 Identifying Misleading Data 164
7.8 Investigating Misleading Data 166
7.9 Exploring the Connection Between 168 Perimeter and Area
7.10 Relating Perimeter and Area 170
7.11 Investigating Area of Right Triangles 172
7.12 Developing a Rule to Calculate Area of Triangles 174

## MODULE 8

8.1 Using Partial Quotients with Decimal Fractions 176
8.2 Extending the Partial-Quotients Strategy with 178 Decimal Fractions
8.3 Solving Division Problems Involving Dollars 180 and Cents
8.4 Calculating Unit Costs (Whole Dollars) 182
8.5 Calculating Unit Costs (Dollars and Cents) 184
8.6 Working with Speed (Kilometres per Hour) 186
8.7 Multiplying and Dividing by 10,100 and 1000188
8.8 Comparing Multiplication and Division 190 Involving Decimal Fractions
8.9 Analysing Diagonals of 2D Shapes 192
8.10 Identifying Parts of a Circle 194
8.11 Interpreting a Timeline and Working with 196 Elapsed Time
8.12 Drawing and Interpreting a Timeline 198

## MODULE 9

9.1 Converting Mixed Numerals to 200 Improper Fractions
9.2 Converting Improper Fractions to 202 Mixed Numerals
9.3 Revising Addition of Common Fractions 204
(Same Denominators)
9.4 Adding Common Fractions 206
(Related Denominators)
9.5 Adding Mixed Numerals (with Bridging) 208
9.6 Adding Mixed Numerals 210
(Related Denominators)
9.7 Converting Between Centimetres and Metres 212
9.8 Converting Between Millimetres 214 and Centimetres
9.9 Converting Between Millimetres and Metres 216
9.10 Converting Between Metres and Kilometres 218
9.11 Developing a Formula to Calculate 220 Volume of Prisms
9.12 Finding the Dimensions of Prisms 222

## MODULE 10

10.1 Introducing and Interpreting Percentage 224 as Hundredths of One
10.2 Interpreting Percentage as an Amount 226

Per Hundred
10.3 Relating Percentage to Common Fractions 228 and Decimal Fractions (Area Model)
10.4 Relating Percentage to Common Fractions 230 and Decimal Fractions (Linear Model)
10.5 Using Common Fractions, Decimal Fractions 232 and Percentages in Everyday Contexts
10.6 Relating Fractions and Percentages 234

Greater Than 100\%
10.7 Working with Reflections 236
10.8 Working with Multiple Transformations 238
10.9 Exploring Tessellations 240
10.10 Working with Units of Capacity 242
10.11 Adding Mixed Units of Capacity 244
10.12 Connecting Volume and Capacity 246

## MODULE 11

11.1 Subtracting Common Fractions 248
(Same Denominators)
11.2 Subtracting Common Fractions 250
(Unrelated Denominators)
11.3 Subtracting Mixed Numerals 252
(Same Denominators)
11.4 Subtracting Mixed Numerals 254
(Related Denominators)
11.5 Finding a Unit Fraction of a Quantity 256
11.6 Finding Simple Fractions of Quantities 258
11.7 Working with Fractions of Money 260
11.8 Working with Percentages of Money 262
11.9 Using Percentage to Find Discounts 264
11.10 Applying Discounts to Calculate Selling Price 266
11.11 Examining Nets 268
11.12 Creating Nets 270

## MODULE 12

12.1 Investigating Order with One Operation 272
12.2 Investigating Order with Multiple Operations 274
12.3 Consolidating Order with Multiple Operations 276 (without Parentheses)
12.4 Introducing Parentheses 278
12.5 Consolidating Order with Multiple Operations 280
(with Parentheses)
12.6 Investigating Order with Multiple 282 Grouping Symbols
12.7 Introducing Coordinates 284
12.8 Exploring the Coordinate Plane 286
12.9 Exploring Shapes on All Four Quadrants 288
12.10 Using Fractions to Describe Probabilities 290
12.11 Conducting Chance Experiments 292
12.12 Working with Probability 294

