

## CONTENTS:

### Chapter 1: Exponents and Scientific Notation

- 1.1 Positive Exponents and the Laws of Exponents
- 1.2 Zero and Negative Integer Exponents
- 1.3 Fractional Exponents
  - A. nth root of a Positive Number
  - B. Fractional Exponents
- 1.4 Comparing Exponents
- 1.5 Scientific Notation
  - A. Representation of Very Small or Very Large Numbers
  - B. Computation
- 1.6 Rounding Numbers to a Specified Number of Significant Figures
- 1.7 Estimations and Accuracy of Calculators
  - A. Estimations
  - B. Estimation and Irrational Numbers
  - C. Accuracy in Calculators

In a Nutshell

Review Exercise 1

Extend Your Learning Curve

Write In Your Journal

### Chapter 2: Linear Equations in Two Variables

- 2.1 Linear Equations in Two Variables
  - A. Review of Linear Equations in One Variable
  - B. Meaning of Linear Equations in Two Variables
- 2.2 Solving Simultaneous Linear Equations in Two Variables using the Graphical Method
- 2.3 Solving Simultaneous Linear Equations in Two Variables using the Substitution Method
- 2.4 Solving Simultaneous Linear Equations in Two Variables using the Elimination Method
- 2.5 Solving Problems using Simultaneous Equations

In A Nutshell

Review Exercise 2

Extend Your Learning Curve

Write In Your Journal

### Chapter 3: Expansion and Factorization of Algebraic Expressions

- 3.1 Expansion of the Products of Algebraic Expressions
  - A. Product of Single Terms
  - B. Product of Two Expressions
- 3.2 Special Products More Properties of Inequalities
- 3.3 Factorization by using Special Products of Algebraic Expressions

In A Nutshell

Review Exercise 3

Extend Your Learning Curve

Write In Your Journal

### Chapter 4: Quadratic Factorization and Equations

- 4.1 Factorization of  $ax^2 + bx + c$

A.  $x^2 + bx + c$

B.  $ax^2 + bx + c$

4.2 Solving Quadratic Equations by Factorization

4.3 Problem Solving Involving Quadratic Equations

In A Nutshell

Review Exercise 4

Extend Your Learning Curve

Write In Your Journal

Chapter 5: Simple Algebraic Fractions

5.1 Simplifying Simple Algebraic Fractions

5.2 Multiplication and Division of Algebraic Fractions

5.3 Addition and Subtraction of Algebraic Fractions

5.4 Fractional Equations

A. Solving Equations Involving Algebraic Fractions

B. Problem Solving Involving Fractional Equations

5.5 More about Formulas

A. Finding the Value of an Unknown Quantity in a Formula

B. Changing the Subject of a Formula

In A Nutshell

Review Exercise 5

Extend Your Learning Curve

Write In Your Journal

Chapter 6: Congruence and Reflections

6.1 Congruence and Reflections

A. Congruent Figures

B. Reflections

6.2 Translations, Rotations and Combining Transformations

A. Translations

B. Rotations

C. Combining Transformations

6.3 Similarity

6.4 Enlargements and Similarity

A. Scale Factors

B. Enlargements

In A Nutshell

Review Exercise 6

Extend Your Learning Curve

Write In Your Journal

Chapter 7: Parallel Lines and Angles in Triangles and Polygons

7.1 Angles formed by Parallel Lines and Transversals

A. Angle Properties

B. Parallel Lines and Transversals

7.2 Interior and Exterior Angles of a Triangle

A. Angle Sum of a Triangle

B. Exterior Angle of a Triangle

7.3 Angles Properties of Special Quadrilaterals

7.4 Polygons

A. Types of Polygons

B. Sum of Interior Angles of a Polygons

C. Sum of Exterior Angles of a Polygons

In A Nutshell

Review Exercise 7

Extend Your Learning Curve

Write In Your Journal

Answers