

# **BA01A: Mathematics for Technicians I**

Catalogue Number	77-BA01A-0001
Category	JobMaster

#### **Introduction to Basic Mathematics I**

## Skill 1: Working with Arithmetic and Algebra

- 1.1: Operations Definition and Properties
- 1.2: What is Algebra?
- 1.3: Equations
- 1.4: Skill Overview
- 1.5: Skill Drill
- 1.6: Concept Review

## **Skill 2: Working with Whole Numbers**

- 2.1: Whole Numbers
- 2.2: Addition of Whole Numbers
- 2.3: Subtraction of Whole Numbers
- 2.4: Multiplication of Whole Numbers
- 2.5: Division of Whole Numbers
- 2.6: Powers/Exponents and Square Roots
- 2.7: Order of Operations
- 2.8: Skill Overview
- 2.9: Skill Drill
- 2.10: Concept Review



#### **Skill 3: Working with Fractions**

- 3.1: Common Fractions
- 3.2: Types of Fractions
- 3.3: Fundamental Rule of Fractions
- 3.4: Negative Fractions
- 3.5: Operations with Fractions
- 3.6: Addition Using Whole Numbers, Mixed Numbers and Fractions
- 3.7: Multiplication of Fractions
- 3.8: Division of Fractions
- 3.9: Skill Overview
- 3.10: Skill Drill
- 3.11: Concept Review

#### **Skill 4: Working with Decimals**

- 4.1: Decimal Fractions
- 4.2: Changing Decimals to Common Fractions
- 4.3: Changing Common Fractions to Decimals
- 4.4: Repeating or Non-Terminating Decimals
- 4.5: Addition of Decimals
- 4.6: Subtraction of Decimals
- 4.7: Multiplication Of Decimals
- 4.8: Division Of Decimals
- 4.9: Skill Overview
- 4.10: Skill Drill
- 4.11: Concept Review

## **Skill 5: Working with Percentages**

- 5.1: Percent and Percentages Definition
- 5.2: Converting Decimals and Common Fractions to Percentages
- 5.3: Converting a Percent to a Decimal
- 5.4: Using Percentages to Express Changes
- 5.5: Skill Overview
- 5.6: Skill Drill
- 5.7: Concept Review



#### **Skill 6: Working with Ratios and Proportions**

- 6.1: Ratios
- 6.2: Proportions
- 6.3: Skill Overview
- 6.4: Skill Drill
- 6.5: Concept Review

## **Skill 7: Working with Systems of Measurement**

- 7.1: Definition
- 7.2: English and Metric Systems of Measurement
- 7.3: Metric Equivalents
- 7.4: Conversion
- 7.5: Skill Overview
- 7.6: Skill Drill
- 7.5: Concept Review

#### **Skill 8: Working with Geometry**

- 8.1: Plane Geometry
- 8.2: Solid Geometry
- 8.3: Angles
- 8.4: Square
- 8.5: Rectangle
- 8.6: Parallelogram
- 8.7: Square, Rectangle and Parallelogram Characteristics
- 8.8: Triangle
- 8.9: Circle
- 8.10: Solids Volume
- 8.11: Arc Length
- 8.12: Skill Overview
- 8.13: Skill Drill
- 8.14: Concept Review



## **Skill 9: Working with Trigonometry**

- 9.1: Definitions
- 9.2: Trigonometry Terms
- 9.3: Trigonometric Functions
- 9.4: Performing Trigonometric Calculations
- 9.5: Skill Overview
- 9.6: Skill Drill
- 9.7: Concept Review

## **Comprehensive Post-test**