BASIC MATHEMATICS

UNIT CODE: ENG/CU/AUT/CC/2/4/A

Relationship to Occupational Standards

This unit addresses the unit of competency: **Apply Basic Mathematics**

Duration of Unit: 50 hours

Unit Description

This unit describes the competencies required in order to apply basic mathematics. It also involves applying basic arithmetic, rational arithmetic, mensurative skills,mensulation, algebra and geometrical calculations.

Summary of Learning Outcomes

1. Apply basic arithmetic
2. Apply rational arithmetic
3. Apply manipulative skills
4. Apply mensuration
5. Apply algebra
6. Apply geometrical calculations

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Apply basic arithmetic	- Types of numbers - Arithmetic operations - Calculations using indices	Written tests Oral questioning Assignments Supervised exercises
2. Apply rational arithmetic	- Converting fractions to percentages - Direct and inverse proportions	Written tests Oral questioning Assignments Supervised exercises

3. Apply manipulative skills	• Expressing decimals into fractions • Significant and non-significant	Assignments Oral questioning Supervised exercises Written tests
4. Apply mensuration	• Concerting units • Calculating areas, volume and perimeters	Assignments Oral questioning Practical tests Observation Supervised exercises Written tests
5. Apply algebra	• Linear equations • Simultaneous equations	Assignments Supervised exercises Written tests
6. Apply geometrical calculations	• Areas of triangles and quadrilaterals	Assignments Oral questioning Supervised exercises Written tests

Suggested Methods of Instruction:

- Group discussions
- Demonstration by trainer
- Exercises by trainee

Recommended Resources

- Scientific Calculators
- Rulers, pencils, erasers
- Charts with presentations of data
- Graph books
- Dice
- Computers with internet connection