

## **Basic Mathematics 2**

MTHH 002 256

Credits: 0.5 units / 5 hours

### **Course Description**

This course begins with a review of the topics covered in the first semester of basic mathematics which include basic operations and properties involving whole numbers. Students are then introduced to fractions, operations with fractions and decimals, and problems involving money and percentages. Word problems are used extensively in this course to relate concept to practical situations. Students practice each concept in a step-by-step manner before moving on to more complex topics.

**Graded Assessments:** 9 Unit Evaluations; NO Projects; 2 Proctored Progress Tests

### **Course Objectives**

When you have completed the materials in this course, you should be able to:

1. Add, subtract, multiply, and divide fractions and mixed numbers.
2. Add, subtract, multiply, and divide decimals.
3. Solve word problems involving fractions, decimals, or percents.
4. Convert fractions to decimals.
5. Convert fractions and decimals to percents.
6. Estimate answers to addition, subtraction, multiplication, and division of decimals.

## Course Outline

### Unit 1: WHOLE NUMBERS

Lesson 1: Adding and Subtracting Whole Numbers

Lesson 2: Multiplying and Dividing Whole Numbers

Lesson 3: Properties of Whole Numbers

Unit 1 Evaluation

### Unit 2: WHAT IS A FRACTION?

Lesson 4: Meaning of a Fraction

Lesson 5: Working with Fractions

Lesson 6: Improper and Mixed Fractions

Unit 2 Evaluation

### Unit 3: ADDING FRACTIONS

Lesson 7: Simple Addition of Fractions

Lesson 8: Addition of Fractions and Mixed Numbers

Unit 3 Evaluation

### Unit 4: SUBTRACTING FRACTIONS

Lesson 9: Simple Subtraction of Fractions

Lesson 10: Subtraction of Fractions and Mixed Numbers

Unit 4 Evaluation

Review for Progress Test 1

### Unit 5: MULTIPLYING AND DIVIDING FRACTIONS

Lesson 11: Multiplication of Fractions

Lesson 12: Division of Fractions

Unit 5 Evaluation

### Unit 6: WORD PROBLEMS AND COMPLEX FRACTIONS

Lesson 13: Word Problems Involving Fractions

Lesson 14: Complex Fractions

Unit 6 Evaluation

## **Unit 7: ADDING AND SUBTRACTING DECIMALS**

Lesson 15: Meaning of a Decimal

Lesson 16: Adding and Estimating Decimals

Lesson 17: Subtracting and Estimating Decimals

Unit 7 Evaluation

## **Unit 8: MULTIPLYING AND DIVIDING DECIMALS**

Lesson 18: Multiplying and Estimating Decimals

Lesson 19: Dividing and Estimating Decimals

Unit 8 Evaluation

## **Unit 9: MONEY AND PERCENT**

Lesson 20: Money Problems

Lesson 21: Percent

Unit 9 Evaluation

Review for Progress Test 2

### **Required Textbook and Materials**

(available through Follett virtual bookstore at <http://highschool.nebraska.bkstr.com>)

No Required Textbook