

General Mathematics 2

MTHH 006 256

Credits: 0.5 units / 5 hours

Course Description

General Mathematics 2 begins with a review of the number system and the basic operations of addition, subtraction, multiplication, and division. Next students will learn about conversion between units both English and metric. Geometry will be explored as students learn about lines, angles, triangles and finding volume, surface area, and area of shapes. Lastly, the course will focus on formulas and equations. Students will learn how to solve linear algebraic equations and graphing inequalities.

Course Objectives

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

1. Add, subtract, multiply, and divide whole numbers, fractions, and decimals, both positive and negative.
2. Use exponents, including scientific notation.
3. Use formulas for proportions, repeated decimals, and geometric shapes, applying order of operations.
4. Use both English and metric measure in applied problems.
5. Find the perimeters, areas, surface areas, circumferences, and volumes of geometric shapes.
6. Use correct geometric terminology for labeling and naming lines, angles, and geometric shapes.
7. Use both the protractor and the compass.
8. Plot graphs of equations on the rectangular coordinate system.
9. Solve simple equations.
10. Solve and graph inequalities.
11. Use set notation, as well as diagrams, to determine sets.
12. Use various strategies, including finding patterns, estimating and testing, drawing diagrams, and working backwards, to solve word problems.

Course Outline

Unit 1 Numbers and Operation

Lesson 1: Whole Numbers, Rational Numbers, and Decimals

Lesson 2: Signed Numbers
Lesson 3: Exponents and Order of Operations
Unit 1 Evaluation

Unit 2 Formulas and Measurements

Lesson 4: Using Formulas
Lesson 5: The Metric System
Lesson 6: The English System
Unit 2 Evaluation

Unit 3 Perimeters, Areas, and Volumes

Lesson 7: Perimeter and Areas of Polygons
Lesson 8: Surface Areas and Volumes
Lesson 9: Circles, Cylinders, and Spheres
Unit 3 Evaluation
Progress Test 1

Unit 4 Lines, Angles, Measurement, and Construction

Lesson 10: Lines and Angles
Lesson 11: Triangles and Scale Drawings
Lesson 12: Compass Constructions
Unit 4 Evaluation

Unit 5 Equations, Graphs, and Inequalities

Lesson 13: Equations
Lesson 14: More Equations
Lesson 15: Graphs and Inequalities
Unit 5 Evaluation

Unit 6 Sets and Problem Solving

Lesson 16: Sets
Lesson 17: Problem Solving
Unit 6 Evaluation
Progress Test 2

Required Textbook and Materials

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

No Textbook

Compass, Protractor, and a Pad of Graph Paper

General Mathematics 2 Syllabus MTHH006256 is the print version of the online course content. This print syllabus is **optional** for this course.