Adult Basic Education (ABE)

Level III Mathematics

Mathematics 3101B

Rational Expressions and Equations/Polynomial Functions/Exponential Functions

Study Guide

Level III Degree and Technical/Business-Related College Profiles Mathematics Courses (Academic)
Mathematics 1101A: Measurement/Trigonometry/Factors and Products
Mathematics 1101B: Roots and Powers/Relations and Functions
Mathematics 1101C: Linear Functions/Systems of Linear Equations
Mathematics 2101A: Reasoning/Angles and Triangles/Trigonometry
Mathematics 2101B: Radicals/Statistics/Quadratic Functions
Mathematics 2101C: Quadratic Equations/Proportional Reasoning
Mathematics 3101A: Set Theory/Counting Methods/Probability
Mathematics 3101B: Rational Expressions and Equations/Polynomial Functions/Exponential Functions
Mathematics 3101C: Logarithmic Functions/Sinusoidal Functions/Borrowing Money

Newfoundland Labrador

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General Information

Introduction

Mathematics 3101B when completed with **Mathematics 3101A and C** is equivalent to the Newfoundland and Labrador senior high school **Mathematics 3201 (Academic**) course. Students must have successfully completed Mathematics 3101A with a minimum of 60% in each course.

Resources

The student resource for this course is*: Principles of Mathematics 12. Nelson. 2012.* Your instructor may also supplement with other resources at his/her discretion.

Study Guide

This Study Guide is intended to make it possible for you to work independently in ABE. You may be able to work on your own for certain periods of time. All students doing this course in Newfoundland and Labrador use this Study Guide. Please ensure your instructor is aware of your progress in this Study Guide. Ask your instructor for assistance whenever you feel you need help.

The Study Guide is organized in two columns:

Required Work	Notes
This column provides a list of all the work required to be completed for the course. Your instructor may supplement with additional items or make small changes to the required work as deemed appropriate.	This column provides additional information that will help you complete the required work.

Recommended Evaluation

Written Notes (Including all the Required Work)	10%
Assignments	20%
Tests	20%
Final Exam (entire course)	50%
Total	**100%**

Instructors have the discretion to make minor changes to this evaluation scheme.

Unit 1: Rational Expressions and Equations

Required Work	Notes
1. Read pages 216-222, and then complete 1-17, pages 222-224.	
2. Read pages 225-229, and then complete 1-14, pages 229-231.	
3. Read pages 232-237, and then complete 1-14, pages 238-239.	
4. Complete Mid-Chapter review, pages 240-243.	
5. Read pages 244-248, and then complete 1-12, pages 249-250.	
6. Read pages 253-257, and then complete 1-19, pages 258-260.	
7. Complete Chapter Self-Test, page 262.	
8. **Assignment #1:** Complete Chapter Review, pages 263-266.	This assignment will be graded and is part of the course evaluation.
9. **Test#1:** Your instructor will give you Test #1.	

Unit 2: Polynomial Functions

Required Work	Notes
1. Read pages 274-276, and then complete 1-4, page 277.	
2. Read pages 278-286, and then complete 1-16, pages 287-291.	
3. Complete Mid-Chapter Review, pages 293-294.	
4. Read pages 295-301, and then complete 1-13, pages 301-305.	
5. Read pages 307-312, and then complete 1-10, pages 313-316.	
6. Complete Chapter Self-Test, page 318.	
7. **Assignment #2:** Complete Chapter Review, pages 319-322.	
8. **Test#2:** Your instructor will give you Test #2.	This assignment will be graded and is part of the course evaluation.

Unit 3: Exponential Functions

Required Work	Notes
1. Read pages 334-336, and then complete 1-3, page 337.	
2. Read pages 338-346, and then complete 1-17, pages 346-350.	
3. Read pages 352-361, and then complete 1-17, pages 361-365.	
4. Complete Mid-Chapter Review, pages 366-369.	
5. Read pages 370-376, and then complete 1-17, pages 377-383.	
6. Read pages 386-394, and then complete 1-22, pages 395-399.	
7. Complete Chapter Self-Test, page 400.	This assignment will be graded and is part of the course evaluation.
8. **Assignment #3:** Complete Chapter Review, pages 401-404.	
9. **Test#3:** Your instructor will give you test #3.	Your instructor may decide to substitute Test #3 with the Final Exam on the entire course.
10. **Final Exam:** Your instructor will give you the Final Exam on the entire course.	