

Adult Basic Education (ABE)

Level III Mathematics

Mathematics 3101C

Logarithmic Functions/Sinusoidal Functions/Borrowing Money

Study Guide

Resource: *Principles of Mathematics 12. Nelson. 2012. ISBN-13: 978-0-17-654038-8*

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



Contents

General Information	3
Introduction	3
Resources	3
Study Guide.....	3
Unit 1: Logarithmic Functions	5
Unit 2: Sinusoidal Functions.....	6
Unit 3: Borrowing and Investing Money	7

General Information

Introduction

Mathematics 3101C when completed with **Mathematics 3101A and B** is equivalent to the Newfoundland and Labrador senior high school **Mathematics 3201 (Academic)** course. Students must have successfully completed Mathematics 3101B 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 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.	Notes 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: Logarithmic Functions

Required Work	Notes
<ol style="list-style-type: none">1. Read pages 412-419, and then complete 1-13, pages 420-424.2. Read pages 426-435, and then complete 1-21, pages 436-438.3. Complete Mid-Chapter Review, pages 439-441.4. Read pages 442-446, and then complete 1-17, pages 446-447.5. Read pages 449-455, and then complete 1-17, pages 455-458.6. Read pages 460-466, and then complete 1-10, pages 466-471.7. Complete Chapter Self-Test, page 473.8. Assignment #1: Complete Chapter Review, pages 474-476.9. Test #1: Your instructor will give you Test #1.	<p>This assignment will be graded and is part of the course evaluation.</p>

Unit 2: Sinusoidal Functions

Required Work	Notes
<ol style="list-style-type: none"><li data-bbox="240 415 935 506">1. Read pages 484-489, and then complete 1-10, pages 489-490.<li data-bbox="240 590 935 680">2. Read pages 491-493, and then complete 1-9, pages 494-495.<li data-bbox="240 764 935 854">3. Read pages 497-505, and then complete 1-15, pages 506-511.<li data-bbox="240 917 935 1008">4. Complete Mid-Chapter Review, pages 513-514.<li data-bbox="240 1050 935 1140">5. Read pages 516-527, and then complete 1-21, pages 528-531.<li data-bbox="240 1224 935 1314">6. Read pages 533-541, and then complete 1-12, pages 541-546.<li data-bbox="240 1398 867 1444">7. Complete Chapter Self-Test, page 549.<li data-bbox="240 1493 935 1583">8. Assignment #2: Complete Chapter Review, pages 550-552.<li data-bbox="240 1625 911 1715">9. Test #2: Your instructor will give you Test #2.	<p data-bbox="979 1549 1354 1675">This assignment will be graded and is part of the course evaluation.</p>

Unit 3: Borrowing Money

Required Work	Notes
<ol style="list-style-type: none"><li data-bbox="235 415 933 499">1. Read pages 636-647, and then complete 1-18, pages 648-651.<li data-bbox="235 552 933 636">2. Read pages 654-655, and then complete 1-4, page 656.<li data-bbox="235 688 933 772">3. Complete Mid-Chapter Review, pages 657-659.<li data-bbox="235 825 933 909">4. Read pages 660-670, and then complete 1-15, pages 670-674.<li data-bbox="235 961 933 1045">5. Read pages 676-685, and then complete 1-14, pages 685-689.<li data-bbox="235 1098 868 1140">6. Complete Chapter Self-Test, page 690.<li data-bbox="235 1192 933 1276">7. Assignment #3: Complete Chapter Review, pages 691-692.<li data-bbox="235 1329 917 1413">8. Test #3: Your instructor will give you Test #3.<li data-bbox="235 1465 950 1549">9. Final Exam: Your instructor will give you the Final Exam on the entire course.	<p data-bbox="974 1192 1356 1318">This assignment will be graded and is part of the course evaluation.</p> <p data-bbox="974 1371 1429 1539">Your instructor may decide to substitute Test #3 with the Final Exam on the entire course.</p>