

Adult Basic Education (ABE)

Level III Mathematics

Mathematics 2101C

Quadratic Equations/Proportional Reasoning Study Guide

Resource: *Principles of Mathematics 11. Nelson. 2011. ISBN-13: 978-0-17-650412-0.*

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



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General Information

Introduction

Mathematics 2101C when completed with **Mathematics 2101A and B** is equivalent to the Newfoundland and Labrador senior high school **Mathematics 2201 (Academic)** course.

Resources

The student resource for this course is: *Principles of Mathematics 11. Nelson. 2011.* 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: Quadratic Functions

Required Work	Notes
<ol style="list-style-type: none"><li data-bbox="240 426 935 506">1. Read pages 396-402, and then complete 1-14, pages 402-404.<li data-bbox="240 562 935 642">2. Read pages 405-411, and then complete 1-16, pages 411-413.<li data-bbox="240 699 935 779">3. Read pages 414-419, and then complete 1-12, pages 419-421.<li data-bbox="240 835 935 957">4. Read page 423 in the Mid-Chapter Review, and then complete the problems on page 424.<li data-bbox="240 1014 935 1094">5. Read pages 425-430, and then complete 1-10, pages 430-431.<li data-bbox="240 1150 867 1188">6. Complete Chapter Self-Test, page 432.<li data-bbox="240 1245 935 1367">7. Assignment #1: Read pages 434-435 in the Chapter Review, and then complete the problems on page 436.<li data-bbox="240 1423 935 1503">8. Test #1: Your instructor will give you Test #1.	<p data-bbox="979 1192 1354 1314">This assignment will be graded and is part of the course evaluation.</p>

Unit 2: Proportional Reasoning

Required Work	Notes
<ol style="list-style-type: none">1. Read pages 444-450, and then complete 1-16, pages 450-453.2. Read pages 454-458, and then complete 1-18, pages 458-461.3. Read pages 463-464 in the Mid-Chapter Review, and then complete the problems on page 465.4. Read pages 466-471, and then complete 1-19, pages 471-474.5. Read pages 475-478, and then complete 1-17, pages 479-482.6. Read pages 483-489, and then complete 1-18, pages 489-493.7. Read pages 494-500, and then complete 1-17, pages 500-503.8. Complete Chapter Self-Test, page 504.9. Assignment #2: Read pages 505-506 in the Chapter Review, and then complete the problems on pages 507-508.10. Test #2: Your instructor will give you Test #2.	<p>This assignment will be graded and is part of the course evaluation.</p> <p>Your instructor may decide to substitute Test #2 with the Final Exam on the entire</p>

Unit 2: Proportional Reasoning

Required Work	Notes
<p>11. Final Exam: Your instructor will give you the Final Exam on the entire course.</p>	