# Adult Basic Education (ABE) 

# Mathematics 1101C Linear Functions/Systems of Linear Equations Study Guide 

Resource: Foundations and Pre-calculus Mathematics 10. Pearson. 2010. ISBN-13-978-0-321-62684-4.

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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 1101C when completed with Mathematics 1101A and B is equivalent to the Newfoundland and Labrador senior high school Mathematics 1201 (Academic) course

## Resources

The student resource for this course is: Foundations and Pre-calculus Mathematics 10. Pearson. 2010. ISBN-13-978-0-321-62684-4. 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: Linear Functions

| Required Work | Notes |
| :---: | :---: |
| 1. Read pages 332-339, and then complete 1-31, pages 339-343. | Slope = Rise / Run |
| 2. Read pages 344-348, and then complete 1-24, pages 348-351. | Understand Slope of a Perpendicular Line, page 346. |
| 3. Read pages 354-361, and the complete 1-24, pages 362-364. | Understand Slope-Intercept Form, page 358. |
| 4. Read pages 365-371, and then complete 1-27, pages 371-374. | Understand Slope-Point Form, page 367. |
| 5. Read pages 377-383, and then complete 1-28, pages 383-385. | Understand General Form, page 378. |
| 6. Complete the Review, pages 388-389. | Read Skills Summary, page 387. |
| 7. Assignment \#1: Complete the Practice Test, page 391. <br> 8. Test \#1: Your instructor will give you Test \#1. | This assignment will be graded and is part of the course evaluation. |

## Unit 2: Systems of Linear Equations

| Required Work | Notes |
| :---: | :---: |
| 1. Read pages 394-400, and then complete 1-18, pages 400-402. |  |
| 2. Read pages 403-408, and then complete 1-19, pages 408-410. | Understand the terms domain, range and function. |
| 3. Read pages 416-424, and the complete 1-27, pages 424-427. | Be sure to verify your solutions. |
| 4. Read pages 428-436, and then complete 1-24, pages 437-439. |  |
| 5. Read pages 442-447, and then complete 1-24, pages 447-449. |  |
| 6. Complete the Review, pages 452-454. | Read Skills Summary, page 451. |
| 7. Assignment \#2: Complete the Practice Test, page 455. | This assignment will be graded and is part of the |
| 8. Test \#2: Your instructor will give you Test \#2. | course evaluation. |
| 9. Final Exam: Your instructor will give you the Final Exam on the entire course. | Your instructor may decide to substitute Test \#2 with the Final Exam on the entire course. |

