# Adult Basic Education (ABE)

## Level III Mathematics

# Mathematics 2102C Slope/Right Triangles and Trigonometry Study Guide

Resource: Math at Work 11. McGraw-Hill Ryerson. 2012. ISBN 13:978-

125901237-2.

#### **Level III General College Profile Mathematics (General)**

Mathematics 1102A: Consumerism and Travel/Measuring Length/Measuring Area

Mathematics 1102B: Getting Paid/Angles

Mathematics 1102C: Pythagorean Relationship/Trigonometry

Mathematics 2102A: Surface Area/Drawing and Design/Volume and Capacity

Mathematics 2102B: Interpreting Graphs/Banking and Budgeting Mathematics 2102C: Slope/Right Triangles and Trigonometry

Mathematics 3102A: Measurement and Probability/Data/Linear Relationships

Mathematics 3102B: Real-Life Decisions/Properties of Figures

Mathematics 3102C: Transformations/Trigonometry



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#### **General Information**

#### Introduction

Mathematics 2102C when completed with Mathematics 2102A and B is equivalent to the Newfoundland and Labrador senior high school Mathematics 2202 (Applied) course. Students must have successfully passed Mathematics 2102B in order to do this course.

#### Resources

The student resource for this course is: *Math at Work 11*. McGraw-Hill Ryerson. 2012. ISBN 13:978-125901237-2.

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 30%

Tests/Quizzes 60%

Total 100%

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

# **Unit 1: Slope**

Required Work	Required Notes
1. Complete Get Ready, pages 260-261.	
2. Read pages 264-265, and then complete 1-9, pages 266-267.	Define slope, rise, run and constant.
3. Read pages 268-269, and then complete 1-9, pages 270-271.	
4. Complete 1-9, pages 272-273.	
5. Read pages 276-277, and then complete 1-7, pages 278-279.	Define angle of elevation.
6. Read pages 280-281, and then complete 1-9, pages 282-283.	Define grade.
7. Complete 1-11, pages 284-285.	
8. Read pages 288-289, and then complete 1-6, pages 290-291.	Define rate of change.
9. Read pages 292-293, and then complete 1-7, pages 294-295.	
10. Complete 1-5, pages 296-297.	
11. Complete Skill Check, pages 298-299.	
12. <b>Assignment #1</b> : Complete Test Yourself, pages 300-301.	This assignment will be graded and is part of the course evaluation.

# **Unit 1: Slope**

Required Work	Required Notes
13. <b>Test #1</b> : Your instructor will give you Test #1.	

# **Unit 2: Right Triangles and Trigonometry**

Required Work	Required Notes
1. Complete Get Ready, pages 306-307.	
2. Read pages 310-311, and then complete 1-6, pages 312-313.	Define primary trigonometric ratios.
3. Read page 314, and then complete 1-8, pages 315-316.	
4. Read page 317, and then complete 1-6, pages 318-319.	
5. Complete 1-5, pages 320-321.	
6. Read pages 324-325, and then complete 1-7, pages 326-327.	
7. Read pages 328-329, and then complete 1-6, pages 330-331.	Define angle of depression.
8. Read pages 332-333, and then complete 1-6, pages 334-335.	
9. Complete 1-7, pages 336-337.	
10. Read pages 338-341, and then complete 1-7, pages 342-343.	
11. Read pages 344-345, and then complete 1-5, pages 346-347.	
12. Read pages 348-349, and then complete 1-5,	

pages 350-351.

# **Unit 2: Right Triangles and Trigonometry**

Required Work	Required Notes
<ul><li>13. Complete 2-5, pages 352-353.</li><li>14. Complete Skill Check, pages 354-355.</li></ul>	
15. <b>Assignment #2</b> : Complete Test Yourself, pages 356-357.	This assignment will be graded and is part of the
16. <b>Test #2</b> : Your instructor will give you Test #2.	course evaluation.
17. <b>Final Exam</b> : Your instructor will give you the Final Exam on the entire course.	