# Adult Basic Education (ABE)

### Level III Mathematics

## Mathematics 1102C

# Pythagorean Relationship/Trigonometry Study Guide

**Resource:** Math at Work 10. McGraw-Hill Ryerson. 2011. ISBN 13:978-007109106-0.

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: Financial Decisions/Properties of Figures Mathematics 3102C: Transformations/Trigonometry



#### **Contents**

General Information	. 1
Introduction	. 1
Resources	. 1
Study Guide	. 1
Unit 1: Pythagorean Relationships	.3
Unit 2: Trigonometry	.4

#### **General Information**

#### Introduction

Mathematics 1102C when completed with Mathematics 1102A and B is equivalent to the Newfoundland and Labrador senior high school Mathematics 1202 (Applied) course. Students must have successfully passed Mathematics 1102B in order to do this course.

#### Resources

The student resource for this course is: *Math at Work 10.* McGraw-Hill Ryerson. 2011. ISBN 13:978-007109106-0.

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

#### **Recommended Evaluation**

Total	100%
Tests/Quizzes	60%
Assignments	30%
Written Notes (Including all the Required Work)	10%

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

Unit 1: Pythagorean Relationships

Paguirad Work	Paguirad Natas
Required work	Required Notes
1. Complete Get Ready, pages 282-283.	
<ol> <li>Read pages 284-287, and then complete 1- 6, pages 288-290.</li> </ol>	Define hypotenuse and leg.
3. Complete 1-5, pages 290-291.	
<ol> <li>Read pages 294-295, and then complete 1- 7, pages 296-297.</li> </ol>	Define the Pythagoras relationship.
5. Read page 298, and then complete 1-6, pages 299-300.	
6. Complete 1-9, pages 301-302.	
7. Read page 305, and then complete 1-8, pages 306-307.	
<ol> <li>Read pages 308-309, and then complete 1- 6, pages 310-311.</li> </ol>	
9. Complete 1-7, pages 312-313.	
10.Complete Skill Check, pages 314-315.	
11. <b>Assignment #1:</b> Complete Test Yourself, pages 316-317.	This assignment will be graded and is part of the course evaluation
12. <b>Test #1:</b> Your instructor will give you Test #1.	

## **Unit 2: Trigonometry**

Required Work	Required Notes
1. Complete get ready, pages 322-323.	
<ol> <li>Read pages 326-327, and then complete 1- 9, pages 328-329.</li> </ol>	Define polygon, similar figures, and corresponding sides
<ol> <li>Read pages 330-331, and then complete 1- 6, pages 332-333.</li> </ol>	
4. Complete 1-9, pages 334-335.	
<ol> <li>Read pages 336-339, and then complete 1- 9, pages 340-341.</li> </ol>	Define opposite side, adjacent side, and tangent ratio.
<ol> <li>Read pages 342-343, and then complete 1- 7, pages 344-345.</li> </ol>	
7. Complete 1-10, pages 346-347.	
<ol> <li>Read pages 348-351, and then complete 1- 9, pages 352-353.</li> </ol>	Define sine ratio.
<ol> <li>Read pages 354-355, and then complete 1- 9, pages 356-357.</li> </ol>	Define cosine
10.Read pages 358-359, and then complete 1- 6, pages 360-361.	
11. Complete 1-8, pages 362-363.	

## Unit 2: Trigonometry

Required Work	Required Notes
12.Read pages 366-367, and then complete 1- 8, pages 368-369.	Define primary trig ratios.
13.Read pages 370-371, and then complete 1- 11, pages 372-373.	
14.Complete Skill Check, pages 376-377.	
15. <b>Assignment #2:</b> Complete Test Yourself, pages 378-379.	This assignment will be graded and is part of the course evaluation.
16. <b>Test #2:</b> Your instructor will give you Test #2.	
17. <b>Final Exam:</b> Your instructor will give you the final exam on the entire course.	