

# Adult Basic Education (ABE)

## Level III Mathematics

---

### **Mathematics 3102C**

### **Transformations/Trigonometry**

### **Study Guide**

**Resource:** *Math at Work 12*. McGraw-Hill Ryerson. 2012. ISBN 13:978-125901238-9.

#### **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**



## **Contents**

General Information .....	1
Introduction .....	1
Resources.....	1
Study Guide.....	1
Unit 1: Transformations .....	3
Unit 2: Trigonometry.....	5

# General Information

## ***Introduction***

**Mathematics 3102C** when completed with **Mathematics 3102A and B** is equivalent to the Newfoundland and Labrador senior high school **Mathematics 3202 (Applied)** course. Students must have successfully passed **Mathematics 3102B** in order to do this course.

## ***Resources***

The student resource for this course is: *Math at Work 12. McGraw-Hill Ryerson. 2012. ISBN 13:978-125901238-9.*

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:

<b>Required Work</b>	<b>Notes</b>
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	30%
Tests/Quizzes	60%
<b>Total</b>	<b>100%</b>

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

## Unit 1: Transformations

Required Work	Required Notes
1. Read pages 264-265, and then complete Get Ready, pages 266-267.	Define transformation, image, dilation and scale factor.
2. Read pages 268-271, and then complete 1-8, pages 272-274.	
3. Read pages 275-277, and then complete 1-7, pages 278-279.	
4. Complete 1-6, pages 280-281.	Define translation.
5. Read pages 282, and then complete 1-8, pages 285-286.	Define successive translation.
6. Read pages 287-288, and then complete 1-7, pages 289-290.	
7. Complete 1-4, page 291.	Define reflection and line of reflection.
8. Read pages 292-294, and then complete 1-7, pages 295- 296.	
9. Read pages 297-298, and then complete 1-8, pages 299-300.	
10. Complete 1-5, page 301.	Define rotation and center of rotation.
11. Read pages 304-307, and then complete 1-9, pages 308-310.	
12. Read pages 311-312, and then complete 1-10, pages 313-315.	

## Unit 1: Transformations

Required Work	Required Notes
<p>13. Complete 1-4, page 315.</p> <p>14. Complete 1-8, pages 316-317.</p> <p>15. <b>Assignment #1:</b> Complete Test Yourself, pages 318-319.</p> <p>16. <b>Test #1:</b> Your instructor will give you Test #1.</p>	<p>This assignment will be graded and is part of the course evaluation.</p>

## Unit 2: Trigonometry

Required Work	Required Notes
<ol style="list-style-type: none"><li>1. Read pages 322-323, and then complete Get Ready, pages 324-325.</li><li>2. Read pages 326-329, and then complete 1-7, pages 330-331.</li><li>3. Read pages 332-333, and then complete 1-8, pages 334-335.</li><li>4. Complete 1-7, pages 336-337.</li><li>5. Read pages 338-341, and then complete 1-9, pages 342-344.</li><li>6. Read pages 345-346, and then complete 1-7, pages 347-348.</li><li>7. Complete 1-11, pages 349-351.</li><li>8. Read pages 352-355, and then complete 1-5, pages 356-357.</li><li>9. Complete 1-8, pages 358-359.</li><li>10. Complete Skill Check, pages 360-361.</li><li>11. <b>Assignment #2:</b> Complete 1-8, pages 362-363.</li><li>12. <b>Test #2:</b> Your instructor will give you Test #2.</li></ol>	<p>Define oblique triangle, acute triangle, obtuse triangle and sine law.</p> <p>Define cosine law.</p> <p>This assignment will be graded and is part of the course evaluation.</p>

## Unit 2: Trigonometry

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