Adult Basic Education

Level II Mathematics

Mathematics 2018
Statistics and Probability

Study Guide

Suggested Resource: *Prism Math Blue Student Workbook (Canadian Edition). McGraw-Hill Ryerson. 2005. ISBN 13: 978-0-07-096033-6 (10:0-07-096033-X).*

Level II Mathematics Courses
Mathematics 2011: Whole Numbers
Mathematics 2012: Fractions
Mathematics 2013: Decimals
Mathematics 2014: Percents
Mathematics 2015: Interest
Mathematics 2016: Measurement
Mathematics 2017: Geometry
Mathematics 2018: Statistics and Probability
Mathematics 2019: Algebra Readiness I
Mathematics 2020: Algebra Readiness II

Newfoundland Labrador

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To the Student

Who should do Mathematics 2018: Statistics and Probability?

You should do this course if you need extra practice related to understanding bar graphs, line graphs, misleading graphs, circle graphs, stem-and-leaf plots, mean, median and mode. This course will also introduce you to probability.

You do not have to complete all the Level II Mathematics courses to move into ABE Level III. The decision to do all or some of the Level II Mathematics courses will be made based on your instructor's assessment. The following will be taken into consideration in this assessment: your previous education, your CAAT (or another standardized test) result, your work experience, your future employment/post-secondary goals, your progress in Level II courses, or any other factor impacting your future success in Level III. For example, if you wish to pursue the Degree and Technical Profile (Academic) in Level III, you will likely have to complete all Level II Mathematics courses. If you intend to pursue the General College Profile (General) in Level III, you may only have to complete a selection of Level II Mathematics courses.

What is the Mathematics 2018 Study Guide?

The Study Guide describes all the work that is required for the completion of this course. It also contains references and notes to help you.

How should I Use the Study Guide?

Before beginning to do the work in this Study Guide, you will need to talk to your instructor about the course and the resources you will need. You should work through the Study Guide page by page, consulting with your instructor as you go.

How is the Study Guide organized?

The Study Guide is organized in two columns, as follows:

Required Work	**Suggested Resources/Notes**
This column provides a numbered list of all the work you are required to do for the course.	This column gives important information on the resources being used and some notes to help you complete the required work.

To the Student

Important Notes

This Study Guide is intended to make it possible for you to work independently in Adult Basic Education. If you use the Study Guide correctly, you may be able to work on your own for certain periods of time. You should always make sure that your instructor is aware of what you are doing. Feel free to ask your instructor for help and guidance at all times.

You should complete all the **Required Work** in this study guide without a calculator. A calculator can be used to check your answers, but it should not be used to simply complete the **Required Work** faster.

Unit 1: Graphs, Mean, Median and Mode

Required Work	Suggested Resources/Notes
1. Read Lesson 1 on page 197 in the text, and then complete numbers 1-7. 2. Read Lesson 2 on page 198 in the text, and then complete numbers 1-7. 3. Read Lesson 3 on page 199 in the text, and then complete numbers 1-6. 4. Read Lesson 4 on page 200 in the text, and then complete numbers 1-11. 5. Read Lesson 5 on page 201 in the text, and then complete number 1. 6. Read Lesson 6 on page 202 in the text, and then complete numbers 1 and 2.	• Think: What are some examples of data that is best displayed in a multiple bar graph? • Always include the following when constructing graphs: title, labels on the axes and a key. • Think: What are some examples of data that is best displayed in a multiple line graph? • Think: Why might a misleading graph be created? Who might create one? • Reminder: Change the percent to a fraction or a decimal when finding the percent of a number. • Use a compass and protractor in order to construct an accurate circle graph. • Remember: If a number is in the data set more than once, a leaf is needed for each number.

Unit 1: Graphs, Mean, Median and Mode

Required Work	Suggested Resources/Notes
7. Read Lesson 7 on page 203 in the text, and then complete numbers 1-2 (all items). 8. Continue with Lesson 7 on page 204 in the text and complete numbers 1-4.	• Be sure to order the numbers from least to greatest before finding the median or mode. • Ask your instructor for help if you do not fully understand each word problem. • It may be helpful to draw a diagram for each word problem before doing calculations.

Unit 2: Probability

Required Work	Suggested Resources/Notes
1. Read Lesson 8 on page 205 in the text, and then complete numbers 1-10. 2. Continue with Lesson 8 on page 206 in the text, and then complete numbers 1-8. 3. Read Lesson 9 on page 207 in the text, and then complete numbers 1-8. 4. Continue with Lesson 9 on page 208 in the text, and then complete numbers 1-7. 5. Read Lesson 10 on page 209 in the text, and then complete numbers 1-6. 6. Continue with Lesson 10 on page 210 in the text, and then complete numbers 1-6. 7. Read Lesson 11 on page 211 in the text, and then complete numbers 1-7.	• Think: What is the probability of getting tails on one flip of a coin? • Reminder: When writing a probability, you must count all possible outcomes to determine the denominator. • Think: What are some examples of events that would have a probability of 0 and 1? • Remember: Check to see that all probabilities are written correctly and in simplest form.

Unit 2: Probability

Required Work	Suggested Resources/Notes
8. Assignment #1: Complete the *Chapter 13 Practice Test* on page 212 in the text. This assignment will be graded and is part of the official evaluation for this course. This assignment will also be the review for the final exam. 9. Final Exam: Write the final exam for **Mathematics 2019: Statistics and Probability**.	• You should show all your calculations on the assignment. You may use a calculator to check your answers. Ask your instructor if you need any help with the assignment. • Your instructor may require you to complete additional work if you do not get a satisfactory grade on Assignment #1. • Only write the Final Exam if you fully understand the material contained in the review.