Adult Basic Education
Level II Mathematics

Mathematics 2011
Whole Numbers

Study Guide

Level II Mathematics Courses
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Newfoundland
Labrador

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Who should do Mathematics 2011: Whole Numbers?

You should do this course if you need extra practice adding, subtracting, multiplying, rounding, and dividing whole numbers. If you completed ABE Level I, this is recommended as your first ABE Level II Mathematics course.

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 2011 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.

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: Addition and Subtraction

Required Work	Suggested Resources/Notes

1. Read Lesson 1 on page 19 of the text, and then complete the following:
 	
   a) Numbers 1-6 (all items)
 	
   b) Solve each word problem on page 20 of the text.
 	
2. Read Lesson 2 on page 21 of the text, and then complete the following:
 	
   a) Numbers 1-6 (all items)
 	
   b) Solve each word problem on page 22 of the text.
	• Think: What can happen if you do not carry the correct number to the top of each column?
	
	• If you get over-whelmed by the number of digits, cover the columns as you add from right to left.
	
	• Make sure that you only subtract smaller digits from larger digits no matter which is on top. Borrow if necessary.

Unit 1: Addition and Subtraction

Required Work	Suggested Resources/Notes
3. <u>Unit Review</u>: Read Lesson 3 on page 23 of the text, and then complete all items and word problems on pages 23-24. Have your instructor check your work, and if you understand the material, move on to item 4. 4. <u>Assignment #1</u>: Complete all items and word problems on pages 25-26. This assignment will be graded, and is part of the official evaluation for this course.	• 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. • Your instructor may require you to complete additional work if you do not get a satisfactory grade on <u>Assignment #1.</u>

Unit 2: Multiplication and Division

Required Work	Suggested Resources/Notes

1. Read Lesson 5 on page 27 of the text, and then complete the following:
 	
   a) Numbers 1-4 (all items)
 	
   b) Solve each word problem on page 28 of the text.
 	
2. Read Lesson 6 on page 29 of the text, and then complete numbers 1-6 (all items).
 	
3. Read Lesson 7 on page 30 of the text, and then complete numbers 1-4 (all items).
	• A 12X Times Table is included at the end of this Study Guide.
	
	• Ask you 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.
	
	• Always look at the digit to the right of the digit you are rounding.
	
	• Your instructor will show you the correct way to round numbers if you are unsure.

Unit 2: Multiplication and Division

Required Work	Suggested Resources/Notes

4. Read Lesson 8 on page 31 of the text, and then complete the following:
 	
    a) Numbers 1-3 (all items)
 	
    b) Solve each word problem on page 32 of the text.
 	
5. Read Lesson 9 on page 33 of the text, and then complete the following:
 	
    a) Numbers 1-3 (all items)
 	
    b) Solve each word problem on page 34 of the text.
 	
6. Read Lesson 10 on page 35 of the text, and then complete the following:
 	
    a) Numbers 1-3 (all items)
 	
    b) Solve each word problem on page 36 of the text.
 	
7. Read Lesson 11 on page 37 of the text, and then complete the following:
 	
    a) Numbers 1-3 (all items)
 	
    b) Solve each word problem on page 38 of the text.
	• Ask you 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: Multiplication and Division

Required Work	Suggested Resources/Notes
8. <u>Assignment #2:</u> Complete all items and word problems on pages 39-40 of the text. This assignment will be graded, and is part of the official evaluation for the course.	
9. <u>Review for Final Exam:</u> *Chapter 1 Practice Test: Operations Involving Whole Numbers* on page 41 of the text covers material from Units 1 and 2 in this course. Complete all items on this page as a review for your final exam.	
10. <u>Final Exam</u>: Write the final exam for **Mathematics 2011: Whole Numbers**. This exam will be very similar to the *Chapter 1 Practice Test* done in item 9.	• Only write the final exam for this course if you fully understand the material contained in the review.

12× Multiplication Table

×	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144