



*Algebra 1A*  
Module 2

Student Name: \_\_\_\_\_ Teacher Name: \_\_\_\_\_

As you work through the chapters in your Algebra 1 course, you will be encouraged to think and to make conjectures while you persevere through challenging problems and exercises. You will make errors – and that’s okay! Learning and understanding occur when you make errors and push through mental roadblocks to comprehend and solve new and challenging problems.

Text: *Algebra 1 Common Core*, Big Ideas, 2015

**To ensure you are learning, you must show your work for all exercises.  
YOU WILL NOT EARN CREDIT FOR ANSWERS WITHOUT WORK.**

**Chapter 2: Solving Linear Inequalities (2.1-2.6)**

- \_\_\_\_\_ Maintaining Mathematical Proficiency (page 51): Complete exercises #1-13 **all**
- \_\_\_\_\_ 2.1 Writing and Graphing Inequalities: Read the lesson and complete exercises #1, 2, 5-9 **all**, 15, 16, 27, 29, 30, 31, 32, 41, 42, 60- 65 **all**, 67
- \_\_\_\_\_ 2.2 Solving Inequalities Using Addition or Subtraction: Read the lesson and complete exercises #1, 7-18 **all**, 21, 23, 27, 28, 32, 39-46 **all**
- \_\_\_\_\_ 2.3 Solving Inequalities Using Multiplication or Division: Read the lesson and complete exercises #1, 3, 4, 5, 7-16 **all**, 19, 28, 40-46 **all**
- \_\_\_\_\_ 2.4 Solving Multi-Step Inequalities: Read the lesson and complete exercises #1-9 **all**, 11, 12, 13, 15, 17, 23, 41, 42, 43
- \_\_\_\_\_ 2.5 Solving Compound Inequalities: Read the lesson and complete exercises #3, 4, 5, 7, 8, 13, 14, 15, 22, 25, 36, 39
- \_\_\_\_\_ 2.6 Solving Absolute Value Inequalities: Read the lesson and complete exercises #1-6 **all**, 22, 41-45 **all**

*Students must complete the Chapter Review and Project with a teacher or tutor at school.*

- \_\_\_\_\_ Chapter Review (pages 94-96): Complete exercises #1-28 **all**
- \_\_\_\_\_ Complete the attached Project (**No project = No credit**)

**A teacher or tutor reviewed the Chapter Review and Project with the student.**

Date: \_\_\_\_\_ Signature: \_\_\_\_\_

<i>Grade</i>
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Algebra 1 Project  
Module 2: Solving Linear Inequalities  
Textbook Pages: 51-98

Solving Inequalities

Be sure to answer questions in complete sentences.

For exercises 1-10, match the phrases and sentences in Column A with their corresponding symbols, expressions, or graphs in Column B by writing the letter from Column B that matches each expression in Column A.

<u>Column A</u>	<u>Column B</u>
_____ 1. Is less than	A. 
_____ 2. All numbers greater than or equal to 3	B. $\geq 3$
_____ 3. Is greater than	C. $\leq$
_____ 4. All numbers greater than 3	D. 
_____ 5. Is less than or equal to	E. $> 3$
_____ 6. Is greater than or equal to	F. $<$
_____ 7. Connie (c) is not as tall as Jose (j)	G. $c \geq j$
_____ 8. Cory (c) is older than Janishia (j)	H. $c \leq j$
_____ 9. Chris (c) is at least as tall as Julie (j)	I. $c > j$
_____ 10. Carol (c) is at most the same height as Jane (j)	J. $c < j$

**Grading Calculations:**

You are not doing as well as you had hoped in one of your classes. So, you want to figure out the minimum grade you need on the final exam to receive the semester grade that you want. Is it still possible to get an A? How would you explain your calculations to a classmate? Let's investigate! (Turn the page!)

1. The grading scale states that you must have a 90% to earn an A for the semester. There are five tests each semester (four exams and one final). Given the percentage scores on the first four exams, determine if it is possible for you to get an A with your score on the final. Remember, the maximum possible score is 100%.

a. Exam 1 = 85, Exam 2 = 80, Exam 3 = 94, and Exam 4 = 93. Can you earn an A?

If so, what score would you need on the final exam? If not, what is the highest percent you can get for your semester grade? Explain.

b. Exam 1 = 82, Exam 2 = 84, Exam 3 = 83, and Exam 4 = 96. Can you earn an A?

If so, what score would you need on the final exam? If not, what is the highest percent you can get for your semester grade? Explain.

2.

a. What is the lowest single score (percent) you could get on one of the five exams and still receive an A?

b. How did you calculate your score?

c. Explain it to your friend who believes the only way to receive an A is by earning an A on every exam. Is she right? Why or why not?