

# ALGEBRA 1-2

(revision #2 as the first draft included the word “ALGBRA”)

Instructor: David Hartman, Ph.D.  
Email: [david.hartman@district145.org](mailto:david.hartman@district145.org)  
Website: <https://drdhartman.com/>

**Welcome** to High School Algebra! You are about to begin a very important course for both high school and your future endeavors! At times, Algebra 1-2 will be geared to be more of a procedural-based course where there was often a distinct procedure that could be followed step-by-step. That’s what I experienced many years ago; some of my own peers were not as successful if they didn’t understand that “one way” of doing it! On the flip side, more students can find more success when Algebra 1-2 is presented with more than one way to look at (or solve) a problem. Thus, I do push multiple perspectives. Further with the abundance of online resources out there, students should have no excuse for finding a way that works for themselves! They key: all students need to work hard. Be persistent. Ask for help. Celebrate success. Never stop trying. You get the picture.

**Push for rigor and your future.** Please know that I want your best. I also want to provide you a rigorous environment to see who is ready to push themselves even more! I will have my eye out for potential candidates to enroll in differentiated (accelerated) geometry next year! Many students stepped up last year; I was very pleased with their success and am fortunate to work again with them in Diff. Geometry this year!

**It is my desire for you to be successful and I am here to help as well as promote peer collaboration.** Students who work hard on assignments and are engaged in class activities will succeed. You should not be afraid to make mistakes; it is a part of learning. If you find yourself struggling:

- Utilize peer support during class.
- Utilize peer support during A&P.
- Utilize peer support before school in pod 2000 (8:00-8:30).
- Utilize the math support room during A&P. (This is a work in progress; we likely will be tapping into the open part of pod 2000 as well!)
- Come in to my room before/after school. (Please know that I do have meetings and other commitments on some days.)
- Send me an email.

<b>Grading:</b>	100% - 94%	A
	93% - 86%	B
	85% - 78%	C
	77% - 70%	D
	69% - 0%	F

**Breakdown:** 80% Summative (“*of*” learning...*demonstrating what you have learned*)

70%: tests, certain projects, quarter exams, and test corrections

10%: semester final exam.

20% Formative (“*for*” learning...*the process along the way*)

Homework, quizzes, certain projects, reflections on test corrections

**Tests:** Tests are purposely designed to include some problems where you must apply what you have learned in class in a slightly different situation. In the future you will be asked to do similar problem solving when you take the ACT/SAT test, and this approach to instruction will help prepare you for future success. I will make sure you know in advance all the necessary elements/ideas, but you will need to determine an appropriate approach and apply it to solve problems. It is expected that all summative tests will be completed in one class period. I will use my professional judgment concerning providing individual students additional time to complete tests. You can meet with me individually to discuss your testing habits and options.

**Projects:** There may be a few chapter projects assigned in conjunction with chapter tests as well as in lieu of chapter tests. These projects, which you will complete outside of class, will afford you time to put together your best effort towards demonstrating an understanding of the concepts found in the chapter.

**Quarter Tests:** Quarter exams will take place near the end of each quarter. I consider the quarter test as the opportunity for you to demonstrate your retention. An abbreviated test, the quarter test will assess your understanding of several of the key concepts addressed during the 9-week period. You will have the opportunity to improve your “original” test score (minus any additions from test corrections) by demonstrating a better understanding of these key concepts.

**Test Corrections:** You will have the opportunity to work through test corrections to earn as much as 50% of the missed points back on chapter test\*. (\*Note: to prevent “leapfrogging” and recognize those who earned an “A” on the original test, the highest possible grade a student, who did not earn an “A” on the original test, can earn is a 94% through the test correction process.) Those who earn an “A” or “B” on the test are not required to work through the test correction (yet they can). Those who earn below a “C” or lower on the test must work through the test correction process. The test correction process includes self-reflection, item analyses, correcting missed problems, explaining each error, and then offering even more reflection! Note: ALL students, regardless of the score earned, must complete the first test correction.

**Semester Final:** This exam, given during the final exam window at the end of semester 1 and semester 2, is comprehensive and counts 10% of the overall semester grade.

**Quizzes:** There will be a mix of traditional in-class quizzes, pop quizzes, partner quizzes, homework quizzes, take-home quizzes, etc. to gauge your level of understanding throughout the quarter. There will be no retakes on quizzes.

**Homework:** You will have an assignment nearly every night. Putting forth effort on each problem is more important than getting every problem correct. I, and your fellow peers, will help you with the ones you did not understand, but you need to try every problem so you know what your questions are. Homework will be graded a variety of ways, including turning it in, self-grading, peer grading, posting a solution/work on the board, a mere completion grade, or not even grading it! Remember: homework is practice. We need to practice! Note: several assignments will include the answers in the back of the book. I am more concerned with the work and reasoning behind those answers. Please know that merely copying the answers from the back of the book will not count as a grade. You need to use the homework as an opportunity to practice and figure out what you are “C” confident in, “S” shaky on, or need to “R” relearn.

**Late to Class?** You must either have a pass from a teacher or a tardy slip from the office. You are expected to arrive to class on time and begin the activity of the day AT the bell.

**Missing Class:** You are expected to attend all classes and the entirety of ALL classes. Recognizing that “life happens,” you should be aware that the class does move on even if you are not in class! When you are gone, (a) check my website to find out if there is an assignment posted and (b) contact a peer in the class to find out what you missed. Send me an email if you need clarification.

**Making up work:** If you are gone for a school-related activity (e.g., sports, clubs, meetings, etc.), you are expected to make up the work BEFORE you miss. Further, you should make arrangements for making up a quiz or test BEFORE you miss. There will be a deduction if you are not proactive regarding school-related absences. You cannot come into class following a school-related activity and ask me, “Did we do anything yesterday?” Also, if you missed a review day due to a school-related activity, you will still be expected to take the exam on the day you return.

If you are gone for an illness or parent excused reason, you will have TWO days to make up what missed (e.g., assignment, quiz, test). I will expect you to make up quizzes and tests before/after school or during A&P/lunch.

**Phones:** For freshman and sophomores, I do not allow phones to be out. Please turn off your phone and store it for the entire class period. If there is an activity where I want you to access your phone, I will instruct you to get your phone out. Should your phone become visible during class or be sitting on your lap or make sounds/vibrations, I will simply ask for it. You will be able to get your phone back at the end of the school day. Should this interruption repeat itself, administration would become the next step. Note: you cannot use your phone as your calculator. You need a separate calculator for class!

### **Classroom Rules:**

## **S.O.A.R.**

S – Safety (this is #1)

O – Opportunity (for you to learn and me to teach!)

A – Attendance (be here and on time)

R – Respect &

Responsibility (these two are big in life)

**Textbooks:** We will be using a brand new book this year: *Big Ideas Math; Algebra 1: A Bridge to Success, 2015 edition*. To be good stewards, most of the assignments this year will come directly from the book. The book is also a great a resource for you to use as you learn geometry in addition to the overabundance of online support on the web (including my own website). My goal is to save the “paper” I plan use for in-class activities, tests, and test correction documents. Thus, I will not assign as many worksheets as I have in the past. SINCE the textbooks are new, I will also expect a good “paper sack” book cover to protect the book at all times! This is not an option. You will be responsible to keeping this book in great condition! Also know these books cost over \$80.00. Students are accountable for the replacement cost should it be lost or damaged! (Note: You will have access to an online book...be patient as I get all of my ducks in a row with this new math series!)

**Calculator:** While any basic scientific calculator that includes square root is sufficient for this course, a graphing calculator is preferred. Most students will likely be using a graphing calculator in future high school and (most definitely) in college math classes. Now is a good time to CONSIDER learning “how” to use it! The best on the market is in the family of the TI-84+ graphing calculators. (If you do purchase one, please bring me the ‘points’ on the package!) Note: I am NOT saying you have to go out and buy an expensive calculator. I just want to consider your future 😊

**Weekly Updates:** I like to periodically send out an overall update on how things are going in class as well as upcoming events (i.e., tests). For this first one, clearly I’m using “paper!” For future updates, I plan to send out an **email** update on most Fridays of the school year. (The email will be generated from powerschool; it automatically sends it to a parent email(s) that has/have been provided to District 145.)

### **Course Requirements:**

- \* Spiral notebook for notes (which can be used on some quizzes and tests.)
- \* Separate spiral notebook for homework assignments out of the book.
- \* Folder with your name on it (which tests and test corrections will go in.)
- \* 3-ring binder (for handouts, worksheet, quizzes, etc.)
- \* 3-hole punched, lined notebook paper in the binder.
- \* Scientific or graphing calculator (one in the family of the TI-84+)
- \* Plenty of pencils and erasers (as well as a few pens)

**REQUESTED Materials:** I am requesting a **“Box of Kleenex”** (or multiple boxes if you can!) to be collected during the week of August 29 – September 2. I am asking each of my classes to “donate” a different type of item. Thank-you in advance for your support.

**Additional Requested Materials:** As I have prepared my classroom last year and again this year, I have made several trips to the store to “build” the classroom I long to have as I work with the youth of District 145. There are still some items I would like to have on “stock” to use with my classes.

24-packs of water bottles

Granola bars

Snacks (e.g, fruit snacks, goldfish, etc)

Reams of white paper

Boxes of manila folders

Paper sacks (grocery bags) to help cover books

*This is only a request. If you are in the position that you are able to send one or more of the items with your student, I would greatly appreciate it. Please send an email so I can monitor any donations. Thank-you.*

**Images for Problem Scoring in Dr. Hartman's Classroom:**

<b>Grading (on a 5 point scale)</b>		
Code*	Gradebook Value	Code Explanation
5	A (100%)	Proficiency (College Preparation)
4	B (90%)	Minimum Proficiency (College Preparation)
3	C (80%)	Proficiency (Graduation Requirement)
2	D (70%)	Minimum Proficiency (Graduation Requirement)
1	F (60%)	Below Proficiency
0	F (50%)	Missing (Cannot be Made Up)

<b>Grading (on a 10 point scale)</b>		
Code*	Gradebook Value	Code Explanation
10	A (100%)	Proficiency (College Preparation)
9	B (90%)	Minimum Proficiency (College Preparation)
8	C (80%)	Proficiency (Graduation Requirement)
7	D (70%)	Minimum Proficiency (Graduation Requirement)
6	F (60%)	Below Proficiency
5	F (50%)	Missing (Cannot be Made Up)

\* Note: A + or - (plus or minus) may be assigned to the code which will either add or subtract 5% from the gradebook value.

**Generic Rubric:** At each course level I teach and for each problem I assign, I seek to assess your content knowledge and problem solving as well as the justification of the solution provided by you. In assigning scores to your work, I hold this image for scores based on a your overall percentage of progress toward a correct answer with sufficient justification.

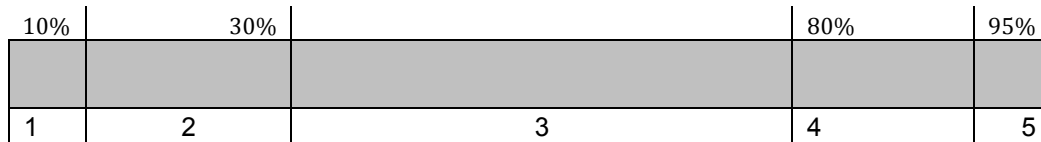


Image of Scores based on Percentage of Work's Correctness & Completeness

**Level 5 – A correct answer.** The solution is correct and the work shown is sufficient to demonstrate the answer is correct. The justification is satisfactory given your grade level (and course) and the explanation requested. Any errors or shortcomings in the correctness or completeness of the justification are so minor that in comparison with the quality of the solution, it is appropriate to ignore them.

**Level 4 – Errors are minor.** There is much of value in your solution and justification that merits the assessment that the solution is close to being correct and the justification appropriate. The work does include some minor errors (in the solution or the logic of the justification) or is incomplete in some way that results in the work falling short of being a completely correct answer.

**Level 3 – Major errors.** Some part of the solution or justification offers work that demonstrates that you have reasonable knowledge of the mathematics that needs to be used to solve the problem or to provide a justification, but at the same time the work (solution or justification) has major errors or (in the case of the justification) is missing.

**Level 2 – Minimal progress in solving the problem (and justifying the answer).** Answers (solution and justification) are incorrect but the work provided indicates that you have some understanding of the mathematics needed to solve the problem or explain your work. The work clearly falls short of offering evidence that “you have reasonable knowledge of the mathematics that needs to be used to solve the problem or provide a justification.”

**Level 1 – No mathematical work of value is included.** The work provided offers no evidence that you have an understanding of the mathematical work needed to solve the problem and explain a solution. Numbers may be written or a diagram drawn, but no important part of the work is correct.

**Level 0 – Problem was not attempted / is missing.**

Note: Your **justification** should be consistent with the wording in the problem.

- Show all work; (No explicit explanation is needed as your work should justify your answer.)
- Show how you found your answer. Be more explicit...use words, diagrams, etc.
- How do you know this (i.e., your answer) is correct? Without a doubt use words, etc.
- Explain your reasoning. Ditto.
- Justify your answer. Ditto but start to be more formal.
- Prove that your answer is correct. Be formal whether 2-column, paragraph, flowchart.

### Dr. Hartman's Final "6" Comments:

There are some very important things that I need to share with you regarding my life as well as your students' opportunity in my class.

1. My oldest child started 9th grade this fall at Waverly High School; my youngest started 6th grade at the middle school. While I am so excited for both of them, I am nervous like any parent. Lauren and Brianna mean the world to me! I want both to have a safe and meaningful experience each and every day. I expect nothing less than the best from their schools, the staff members that will work with them, and their fellow classmates. I know you love your children as much as I love mine. You expect the best for them at school at all times. I keep this in mind everyday.

2. WHS is still a bit new to me! I left my 20-year career in Lincoln Public Schools (including 13 years at Lincoln Southwest and a position as department chair) to invest into District 145 last school year. While I spent more time and energy investing into students last year than any previous year in my career, I loved every minute of it. It is a privilege for me to work with your student! Please continue to offer grace and patience as I continue to adjust!

3. The best way to reach me is via email: [David.Hartman@District145.org](mailto:David.Hartman@District145.org). Again, I try to send out updates, kind of like a class newsletter, every week or so. I will not, however, "push" grades. I am asking you that you periodically review your student's grade on PowerSchool.

4. Some of your children are involved in a lot! Balance seems to be a challenge (and goal) for most teenagers. From sports and clubs to work and family time, keeping a healthy balance is a necessity for all of us! Being a husband, father, teacher, student council co-sponsor, and NWU Advantage statistics instructor, I also struggle with balance every week. I understand when your child feels a bit overwhelmed during various times of a course.

5. My **WEBSITE**: [drdhartman.com](http://drdhartman.com) I usually post assignments daily. This is helpful for students, especially when they miss class. My website also gives you the opportunity to know what we are doing in class. I encourage you to take the time to bookmark my website; also spend some time getting to know more about my personal and professional background.

6. Videos: I use my iPad from time-to-time to create "help" videos. My goal is to have a help video for every review assignment handed out. I go through each and every problem on the review...sometimes I even offer more than one approach. There are times I create a "help" video for a concept that students struggle with. There are also times that I create a "lesson" video, created during the time I am actually teaching. I have made these in the past when large numbers of students are absent or the content is just of that "critical" type. These videos have helped so many students in the past. Students will find the links to my videos on the assignment log on the website. (There are even times when a student emails me...asking for help...I use my iPad to create a video that I can send back to that student within a matter of minutes!)

*Thank-you for taking the time to read this,*

*Dr. Hartman*

Note: I would appreciate if you would be willing to send me an email and share some of the strengths of your son/daughter as well as any other information that will help me as I work to maximize their success in this course!