## Course: Saxon Algebra 2

## Teacher: Mr. Jim Lawson

## Contact Information:

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## Materials/Supplies Needed for This Course:

Students MUST have the following:

- Textbooks (Saxon Algebra 2 2nd or 3rd edition) and SolutionsManual
- Scientific Calculator (We will do some graphing on the TI-83/TI-84 to better prepare for College Algebra, but any scientific calculator is acceptable for this course.)
- 3-ring Binder ( 1.5 " or 2 ")
- 3 Tab Dividers Labeled: 1) Notes/Handouts 2) Homework 3) Tests/Quizzes
- Graph Paper, Notebook Paper, Pencils
- Straight Edge (ruler or protractor)
- Compass, Protractor


## My Goals are that each student would:

- become a critical thinker and a competent problem solver,
- hone their math skills and build confidence,
- be prepared for college entrance exams such as the SAT or ACT,
- see the beauty and precision of our Designer in the complexities of the math.


## What you can expect of the Teacher:

- I will be professional, prepared, and on time.
- I will be available to you, the parent, so that our partnership will be successful.
- I will be attentive to each student and seek to develop their unique perspective as it pertainsto problem solving as well as challenge them to achieve beyond what they have ever thought possible.


## What I expect of Parents:

## I need Parents to:

- assist students in keeping up with the syllabus so that the work is turned in on time every week,
- grade the daily homework and mark the numbers wrong across the top of the page,
- provide the necessary assistance when a student struggle,
(Grade homework to identify gaps in concept comprehension.
Provide oversite to ensure the student is reviewing the online videos for missed concepts.
Communicate with the teacher with any continuing concerns so they can be addressed.),
- occasionally proctor tests, online tests, and quizzes (This means making sure that they take these assessments with integrity and NO outside assistance.)


## What I expect of Students:

## Students will:

- complete the weekly lessons and turn them in on time,
- ask questions and participate actively in class-(PLEASE contact me if you need help!),
- watch the online videos when extra assistance is necessary,
- not associate their worth with a letter grade. Self-esteem should NOT be tied to letter grades. Studying math can be a great experience in tackling a challenge, learning perseverance, and maintaining a great attitude. All of these are terrific benefits regardless of individual letter grades on assignments and assessments. As a strong work ethic is applied skill level WILL go up.


## Grading:

Grades are given to a variety of assessments, tasks, and projects. ONE low grade will NOT sink your academic ship-so don't lose heart if you get a poor grade on an assessment. It is important that students do well on tests and those students independently master the concepts. Grades are weighted as follows:

- 75\% Tests and Quizzes
- $\mathbf{2 0 \%}$ Homework (5 points per assignment)
- 5\% Notebook


## How to Get an ' $A$ ' in this Class:

- Turn your completed and graded homework in ON TIME!
- Keep a great notebook.
- Show your work (where applicable) and work toward developing the processes necessary to do upper math.
- Work consistently every day. Do not make it a habit to let your homework pile up or do it all in one day.
- Get help when you need it.


#### Abstract

Absences: The FOFCAI Policy is to give students one extra class period to turn in work due to an EXCUSED absence. If you should need more time to get caught up, it is up to the parent to contact the teacher and work out additional due dates. Assignments that are $\mathbf{2}$ weeks past the original due date are given zeros. Unexcused absences include but are not limited to: sleeping in and not contacting the school in advance in writing for a planned absence. (There is a Planned Absence Form that MUST be filled out in advance.) You can lose your seat in the class if you miss more than 4 classes.


## TESTS

Some tests are proctored at home and some are given online or in class. Approximately 4 assessments are scheduled per quarter.
The lowest test of each semester MAY be dropped, but tests that were given a zero because they were not turned in will NOT be dropped.
Cheating is grounds for dismissal from the class and/or school. Students are not to receive any outside assistance during a test.

| Course: Algebra 2 Week-by-Week * |  |  |  |
| :---: | :---: | :---: | :---: |
| Semester I |  |  | Semester II |
| 1 | Lessons 1-3 (Polygons, Triangles, Trans, Neg Exp, Like Terms) (A \& B review only) | 19 | Lessons 61-63 (Chemical Mix, Complex Roots, Addition of Vectors ) |
| 2 | Lessons 4-6 (Distrib Property, Equations, Word Problems, Fractions, Consecutive Int) | 20 | Lessons 64-67 (Complex Fractions, Adv Substitution, Radical Denominators) |
| 3 | Lessons 7-9 (Percents, Graphing Lines, Word Problems) | 21 | Lessons 68-70 (Powers \& Roots, Gas Law, Abstract Equations) |
| 4 | Lessons 10-13 (Pythagorean, Fractions, Equation of Line, Substitution) | 22 | Lessons 71-74 (Quadratic Formula, Negative Angles, Radical Denom., Uniform Motion) |
| 5 | Lessons 14-16 (Lines, Elimination, Dividing Polynomials) | 23 | Lessons 75-77 (Factoring Denom., Sub \& Elim, Neg Vectors, Multiple Radicals) |
| 6 | Lessons 17-21 (Subsripts, Ratio/Value Word Problems, Radicals, Slopes of \|| lines) | 24 | Lessons 78-81 (Force Vectors, Metric Volume, Special Triangles, Div of Complex Numbers) |
| 7 | Lessons 22-24 (Scientific Not, 2 State of Equality, Uniform Motion, Graphs ) | 25 | Lessons 82-84 (Simplifications, Product \& Power Rules, Systems of Equations) |
| 8 | Lessons 25-28 (Factoring, Cancelling, Rational Expressions, Complex Fractions) | 26 | Lessons 85-88 (Syst of Non-Lin Equations, Trichotomy Axiom, Slope, Distance Formula) |
| 9 | Lessons 29-32 (Uniform Motion, Neg Reciprocals, Perp Lines, Square Roots) | 27 | Lessons 89-90 (Conjunction, Disjunction, System of 3 Equations) |
| 10 | Lessons 33-35 (Algebra, Complex Fractions, Uniform Motion, Fract Exponents) | 28 | Lessons 91-93 (Linear Inequalities, Boat-in River, Discriminant) |
| 11 | Lessons 36-39 (Dividing Rational Exp, Chemical Compounds, Solve/Factor, Diff/2 Squares) | 29 | Lessons 94-97 (Functions, Nonlinear Systems, Joint Variation, Irrational Roots, Adv Substitution) |
| 12 | Lessons 40-42 (Abstract Equations, Unit Mult, Scientific Notation) | 30 | Lessons 98-100 (Numbers, Absolute Val Inequalities, Graphs of Parabolas) |
| 13 | Lessons 43-46 (Sine, Cosine, Tangent, Right Triangles, Radicals \& Exponents) | 31 | Lessons 101-104 (Percent Markups, Sum 7 Product of Functions, Polynomial Division) |
| 14 | Lessons 47-49 (Rate Conversions, Radical Equations, Intercepts, Transversals) | 32 | Lessons 105-108 (Adv Factoring, 3 Equations, Sum/Diff 2 Cubes) |
| 15 | Lessons 50-52 (Quadratic Equations, Complete Square, Imaginary, Chemical Mix) | 33 | Lessons 109-111 (Fractional Exponents, Quadratic Inequalities) |
| 16 | Lessons 53-55 (Metric Units, Polar Coordinates, Quadratic Equations | 34 | Lessons 112-114 (Quad Inequalities, Less Than, Logarithms, Non Linear Inequalities) |
| 17 | Lessons 56-58 (Angles in Circles, Ideal Gas Laws, Lead Coefficient) | 35 | Lessons 115-117 (Compound Interest, Growth, Probability, Sets) |
| 18 | Lesson 59-60 (Experimental Data, Direct \& Inverse Variation) | 36 | Lessons 118 (Logarithmic Equations) |

## * These plans are a guideline and may be altered throughout the year. Circumstances such as hurricanes or other events may require that this schedule be updated.

Honors Options: Students may take Algebra I at the Honors Level as follows:

- Being tested at all Assessments with the Honors Tests and a project each semester
- They will do all of the Uniform Motion Problems and be proficient with Quadratic Formula
- Doing outstanding, consistent work on all Homework and Assignments-following directions, showing work (Students who do not show work cannot get an honors credit.)
- Turning in assignments on time (Students who are chronically late cannot get an honors credit.)

