**Algebra ½**

Class Syllabus 2013 – 2014

1. **Instructor Information**

Teacher:

Contact Information: Please feel free to call or e-mail me about any questions. If you call or e-mail before 9:00 pm I will try to respond that evening.

1. Phone:

2. E-mail:

1. **Course Description**

Algebra ½ is designed to expand the student’s knowledge and appreciation of God’s orderliness in creation through mathematics. This course is an overview of Numbers and Operations, Algebra, Geometry Measurements, Data Analysis and Probability, and Problem Solving. This course will primarily include visual and auditory demonstrations of the mathematical concepts and independent practice.

1. **Goals and Aims** 
   1. Enjoy thinking rationally and analytically.
   2. Recognize mathematics as God’s language for science
   3. Appreciate law, order, and absolutes.
   4. Calculate quickly and correctly
   5. Be well prepared for higher level math courses
2. **Objectives: The students will be able to…**
   1. Interpret number lines
   2. Calculate using Unit Multipliers
   3. Calculate Perimeter and Area
   4. Recognize Prime Numbers
   5. Compute Powers and Roots
   6. Illustrate exponent laws
   7. Illustrate Order of Operation
   8. Write in Scientific Notation
   9. Classify Quadrilaterals
   10. Calculate using Functions
   11. Solve equations
   12. Graph Functions
   13. Solve Multi-Step Equations
   14. Compute Negative Exponents
   15. Calculate Slope Intercepts
   16. Graph Inequalities
   17. Predict Sequences
   18. Recognize Non-repeating, Non-repeating
   19. Solve Direct Variations
   20. Solve Indirect Variations
   21. Compute recursive numbers
   22. Draw Plots
   23. Predict Growth and Decay
   24. Rationalize Denominators
3. **Textbooks and Instructional Equipment**
   1. Saxon Math Course 3
   2. Saxon Power-up tests
   3. Saxon Reteaching Masters
   4. Kuta Software Worksheets
4. **Equipment and Material** 
   1. Compass
   2. Ruler
   3. Protractor
5. **Course requirements**
   1. **Logistics**
      1. Students will record daily homework assignments.
      2. Attend class five days a week, teacher or principle must be notified ahead of time if student is going to be missing.
      3. There will be a total of eighteen tests, including semester finals, mid-term, and a final exam.
      4. Absent students are responsible for all catch-up work.
6. **Procedures** 
   1. All homework will be due the following class period unless otherwise instructed.
   2. All papers will be handed across and then front.
   3. Late homework will be penalized one increment (A to B) per class period overdue, and unfinished slips will be given appropriately. ( NHMS policy)
   4. Most classes will begin with in-class home work grading. Students will exchange with designated partner.
   5. Questions while grading should be marked with question marks and saved until the end.
   6. Tests and quizzes will be overturned and placed on the corner of one’s desk when finished, all edges must be smooth
7. **Methods** 
   1. **Teaching Methods**
      1. Lecture 2. Demonstration
8. Graphic Organizers 4. Cooperative Learning
9. Review
   1. **Assessment**
      1. Tests 2. Review

3. Power-up tests 4. Homework

1. **Grading Policies** 
   1. Tests 60%
   2. Homework 20%
   3. Power-up tests 20%
2. **Course Outline**

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| Week Number | Sections | Dates | Suggested Pacing |  |
| Week 1 | Section 1 | Aug. 27-30 | Lessons 1-3 |  |
| Week 2 | Sept. 3-6 off Monday | Lessons 4-7 |  |
| Week 3 | Sept. 9-13 | Lessons 8-10, Test, Inv. |  |
| Week 4 | Section 2-3 | Sept. 16-20 | Lessons 11-15 |  |
| Week 5 | Sept. 23-27 | Lessons Test, 16-19 |  |
| Week 6 | Sept.30-Oct.4 | Lessons 20, Test, Inv.,21-22 |  |
| Week 7 | Section 3-4 | Oct. 7-10 | Lessons 23-25, Test |  |
| Week 8 | Oct. 14-18 Extra Day | Lessons 26-30 |  |
| Week 9 | Oct. 21-25 End of First Quarter | Lessons Test, Inv., 31-33 |  |
| Week 10 | Section 4-5 | Oct.28-Nov. 1 | Lessons 34-35, Test, 36-37 |  |
| Week 11 | Nov.4-6 Off 7-8 | Lessons 38-40 |  |
| Week 12 | Nov. 11-15 | Lessons Test, Inv., 41-43 |  |
| Week 13 | Section 5-6 | Nov. 18-22 | Lessons 44-45, Test, 46-47 |  |
| Week 14 | Nov. 25-29 Off 28-29 | Lessons 48 Extra Day |  |
| Week 15 | Dec. 3-6 Off 2 | Lessons 49-50, Test, Inv. |  |
| Week 16 | Section 6-7 | Dec. 9-13 | Lessons 51-55 |  |
| Week 17 | Dec. 16-20 | Lessons Test, 56-59 |  |
| Week 18 | Dec.23-24 Extra Day | Lesson 60 |  |
| Week 19 | Section 7-8 | Dec. 30-Jan. 1 Off Jan. 2-3 Extra Day x2 | Lessons Test and Inv. |  |
| Week 20 | Jan. 6-10 | Lessons 61-65 |  |
| Week 21 | Jan. 13-17 | Lessons Test, 66-69 |  |
| Week 22 | Section 8-9 | Jan. 20-24 End of Second Quarter | Lessons 70, Test, Inv., 71-72 |  |
| Week 23 | Jan. 27-31 | Lessons 73-75, Test, 76 |  |
| Week 24 | Feb. 3-7 | Lessons 77-80, Test |  |
| Week 25 | Section 9-10 | Feb. 10-14 | Lessons Inv. 81-84 |  |
| Week 26 | Feb. 17-21 Off 21 | Lessons 85, Test, 86-87 |  |
| Week 27 | Feb. 24-28 | Lessons 88-90, Test Extra Day |  |
| Week 28 | Section 10-11 | March 3-7 | Lessons Inv., 91-94 |  |
| Week 29 | March 10-14 | Lessons 95, Test, 96-98 |  |
| Week 30 | March 17-21 | Lessons 99-100, Test Inv., 101 |  |
| Week 31 | Section 11-12 | March 24-28 End of Third Quarter X-D x3 | Lessons 102-105, Test |  |
| Week 32 | March 31-Apr. 4 | Lessons 106-110 |  |
| Week 33 | Apr. 7-11 | Lessons Test, Inv., 111-113 |  |
| Week 34 | Section 12 | Apr. 14-18 Off 18 | Lessons 114-115, Test |  |
| Week 35 | Apr. 21-25 Off 21 | Lessons 116-120 |  |
| Week 36 | Apr. 28-May 2 | Lessons Test Inv. |  |
| Week 37 |  | May 5-9 | Extra Days |  |
| Week 38 | May 12-16 | Extra Days |  |
| Week 39 | May 19-23 | Extra Days |  |