ALGEBRA 1
Fall, 2012; TTH 11:00-12:15
Instructor: Daniel Sweet
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COURSE DESCRIPTION: This course involves a study of the basics of algebra, commonly taught in the 8th or 9th grade in schools.

COURSE TEXTS
Required Texts:
The text for this course is *Algebra 1: An Integrated Approach* (South-Western Educational Publishing, 1997, Gerver, Sgroi, Carter, Hansen, Molina and Westegaard, cost: under $10 used at Amazon.) Take some time to familiarize yourself with the texts, especially with the structure of assignments at the end of each section. Reasons for this text: 1. it is very inexpensive used, 2. it does a good job of constantly reviewing earlier material, 3. it requires application at every turn so that it is not purely solving algebra problems, 4. the authors wrote an intermediate algebra that is also cheap and would function as a good second year course.

COURSE REQUIREMENTS: There are four aspects of this course, which are designed to introduce students to Algebra 1 while also solidifying foundational mathematical principles. The first will be maintaining a notebook with class notes and all returned homework assignments, quizzes and tests. The second assignments will come from the textbook; these will consist of showing all work on assigned problems. The third aspect is a weekly quiz, designed primarily to determine a student’s grasp of the major topics in Algebra. The fourth aspect is tests, which will be cumulative.

There are two tests scheduled for this course. There will also be 6 quizzes. I will drop your worst quiz grade. In addition to the two class meetings each week, approximately 5 hours of outside of class work will be necessary to complete the course. That time may vary depending on how quickly the student acquires the basic concepts and how quickly they finish their homework. Algebra, like all math subjects, requires time, practice and hard work.

GRADES: My grade scale is as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A+</td>
<td>100-98</td>
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<td>B+</td>
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<td>C+</td>
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<td>D+</td>
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<td>67-63</td>
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<td>59— F</td>
<td>62-60</td>
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Grades for this course will be computed on the following basis:
- Notebook with class notes, homework, quizzes, and tests: 10 percent
- Homework from textbook: 30 percent
- Quizzes: 30 percent
- Tests: 30 percent (each test is worth 15 percent)

The notebook grade is all or nothing so keep your notebook up-to-date.

All quizzes and tests will be take-home to be administered by the parent and returned at the next class time. All homework is due on the date assigned. Late work will only be accepted on the basis of an excused absence.
# CLASS SCHEDULE:

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC/ASSIGNMENT</th>
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<tbody>
<tr>
<td>Thursday, 8/16</td>
<td>Open House, syllabus, book and supply list, answer questions; Homework – Read and sign syllabus, Read Sections 1.1, 1.2, 1.3</td>
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</tbody>
</table>
| Tuesday, 8/21 | Sections 1.1, 1.2, 1.3   
Homework – Read Sections 1.4, 1.5, 1.6   
Section 1.2: Try These 1-4, Practice 1-6, Extend 8-10  
Think Critically 15-16 (grades 9-12)  
Section 1.3: Try These 1-6, Practice 1-18, Mixed Review 34-35  
Think Critically 27-33 (grades 9-12) |
| Thursday, 8/23 | Sections 1.4, 1.5, 1.6  
Homework – Read Sections 1.7, 1.8, 1.9  
Section 1.5: Try These 4-8, Practice 4-12, Extend 14-15  
Think Critically 19-20 (grades 9-12)  
Section 1.6: Try These 1-6, Practice 1-6, Extend 12-13, Mixed Review 21-24  
Think Critically 14-17 (grades 9-12) |
| Tuesday, 8/28 | Sections 1.7, 1.8, 1.9   
Homework – Section 1.7: Try These 1-4, Practice 1-10, Extend 14-24, Mixed Review 30-34  
Think Critically 25-29 (grades 9-12)  
Section 1.8: Try These 1-9, Practice 1-5, 9-11  
Practice 6-8 (grades 9-12)    
Section 1.9: Page 44 Apply the Strategy 15-21  
Chapter Assessment 1-18 |
| Thursday, 8/30 | Review for first take home quiz: Work page 50, Chapter Review  
Answer any questions from homework  
Homework – Read 2.1, 2.2, 2.3  
Cumulative Review 1-18  
First take home quiz on Unit 1 due 9/4 |
| Tuesday, 9/4 | Sections 2.1, 2.2, 2.3   
Homework – Read 2.4, 2.5, 2.6  
Section 2.2: Try These 1-21, Practice 1-38, Extend 41-44  
Think Critically 54-56 (grades 9-12)  
Section 2.3: Try These 1-21, Practice 1-36, Extend 42-49, Mixed Review 54-60  
Think Critically 52-53 (grades 9-12) |
| Thursday, 9/6 | Sections 2.4, 2.5, 2.6   
Homework – Read 2.7, 2.8, 2.9  
Section 2.5: Try These 1-25, Practice 1-52, Extend 52-63  
Think Critically 66-69 (grades 9-12)  
Section 2.6: Think Back 1-3, Explore 4-37 |
Tuesday, 9/11  
Sections 2.7, 2.8, 2.9  
Homework – Section 2.7: Try These 1-13, Practice 1-29, Extend 33-43  
Think Critically 44-49 (grades 9-12)  
Section 2.8: Try These 1-20, Practice 1-27, Extend 29-42, Mixed Review 48-55  
Think Critically 45-47 (grades 9-12)  
Section 2.9: Investigate further 7.12  
Apply the Strategy 15-16 (grades 9-12)  
Chapter Assessment 1-33  

Thursday, 9/13  
Review for Chapter 2 quiz, Work Chapter Review on pages 106-107  
Answer any questions from homework  
Homework – Read 3.1, 3.2, 3.3  
Cumulative Review 1-37  
Second take home quiz on Unit 2 due 9/18  

Tuesday, 9/18  
Sections 3.1, 3.2, 3.3  
Homework – Read 3.4, 3.5, 3.6  
Section 3.1: Try These 1-25, Practice 1-20, Extend 24-32, Mixed Review 54-55  
Extend 41-47, Think Critically 49-53 (grades 9-12)  
Section 3.3: Try These 1-8, 10-21, Practice 1-26, Extend 29-32  
Think Critically 36-41 (grades 9-12)  

Thursday, 9/20  
Sections 3.4, 3.5, 3.6  
Homework – Read 3.7, 3.8, 3.9  
Section 3.4: Try These 1-8, 11-18, Practice 1-31, Extend 33-47,  
Mixed Review 57-63  
Section 3.5: Try These 1-16, Practice 1-14, Extend 16-23, Mixed Review 32-38  
Think Critically 27-30 (grades 9-12)  
Section 3.6: 1-16, Practice 1-29, Extend 31-37  
Think Critically 39-46 (grades 9-12)  

Tuesday, 9/25  
Sections 3.7, 3.8, 3.9  
Homework – Section 3.7: Try These 1-19, Practice 1-26, Extend 27-33  
Think Critically 35-37 (grades 9-12)  
Section 3.8: Try These 1-14, Practice 1-19, Extend 23-25, Mixed Review 31-35  
Think Critically 26-30 (grades 9-12)  
Section 3.9: Apply the Strategy 13-20  

Thursday, 9/27  
Review for Chapter 3 quiz, Work Chapter Review on pages 160-161  
Answer any questions from homework  
Homework – Read 4.1, 4.2, 4.3  
Cumulative Review 1-20  
Third take home quiz on Unit 3 due 10/2
Monday, 10/2
Sections 4.1, 4.2, 4.3
Homework – Read 4.4, 4.5, 4.6
Section 4.2: Try These 1-6, Practice 1-13, Extend 15-20, Mixed Review 28-34
Think Critically 22-27 (grades 9-12)
Section 4.3: Try These 1-11, Practice 1-16, Extend 20-22, Think Critically 26-33

Tuesday, 10/3
Sections 4.4, 4.5, 4.6
Homework – Read 4.7, 4.8, 4.9
Section 4.4: Try These 1-11, Practice 1-4, 6-14, Extend 15-20,
Think Critically 21-24 (grades 9-12)
Section 4.6: Try These 1-11, Practice 1-15, Extend 16-20, Mixed Review 25-32
Think Critically 21-24 (grades 9-12)

Wednesday, 10/4
Sections 4.7, 4.8, 4.9
Homework – Section 4.7: Try These 1-6, 8-9, Practice 1-4, 6-11, Extend 12-19,
Mixed Review 26-33
Think Critically 20-25 (grades 9-12)
Section 4.9: Try These 1-2, Practice 1-4, Extend 6-8, Mixed Review 14-32
Think Critically 9-13 (grades 9-12)

Thursday, 10/5
Review for FIRST TEST, Work Chapter Review on pages 212-213
Answer any questions from homework
Homework – Read 5.1, 5.2, 5.3
Cumulative Review 1-24
FIRST TAKE HOME TEST, cumulative due 10/16

Tuesday, 10/9
Sections 5.1, 5.2, 5.3
Homework – Read 5.4, 5.5
Section 5.1: Try These 1-9, Practice 1-4, 6-16, Extend 17-30
Think Critically 31-36 (grades 9-12)
Section 5.2: Make Connections 9-20
Section 5.3: Try These 1-9, Practice 1-29, Extend 31-37, Mixed Review 43-53
Think Critically 38-42 (grades 9-12)

Thursday, 10/10
Sections 5.4, 5.5
Homework – Read 5.6, 5.7
Section 5.4: Try These 1-9, Practice 1-20, Extend 24-32, Mixed Review 37-42
Think Critically 33-36 (grades 9-12)
Section 5.5: Try These 1-16, Practice 1-31, Extend 32-39, Mixed Review 44-49
Think Critically 40-43 (grades 9-12)

Tuesday, 10/11
Sections 5.6, 5.7
Homework – Section 5.6: Try These 1-3, Practice 1-9, Extend 10-14
Think Critically 15-19 (grades 9-12)
Section: 5.7: Apply the Strategy 9-16
Chapter Assessment 1-40
Thursday, 10/25  
Review for Chapter 5 quiz, Work Chapter Review on pages 256-257
Answer any questions from homework
Homework – Read 6.1, 6.2, 6.3
Cumulative Review 1-23
Fourth take home quiz on Unit 5 due 10/2 due 10/30

Tuesday, 10/30  
Sections 6.1, 6.2, 6.3
Homework – Read 6.4, 6.5
Section 6.1: Think Back 1-2, Explore 3-10, Make Connections 11-18
Section 6.2: Try These 1-16, Practice 1-33, Extend 35-39, Mixed Review 41-47
Section 6.3: Try These 1-24, Practice 1-25, Extend 27-37, Mixed Review 44-52
Think Critically 38-43 (grades 9-12)

Thursday, 11/1  
Sections 6.4, 6.5
Homework – Read 6.6, 6.7, 6.8
Section 6.4: Try These 1-15, Practice 1-18, Extend 20-31, Mixed Review 36-48
Think Critically 32-35 (grades 9-12)
Section 6.5: Try These 1-19, Practice 1-13, Extend 15-32, Mixed Review 39-47
Think Critically 33-38 (grades 9-12)

Tuesday, 11/6  
Sections 6.6, 6.7, 6.8
Homework –
Section 6.6: Try These 1-7, Practice 1-9, Extend 11-18, Mixed Review 21-34
Think Critically 19-20 (grades 9-12)
Section 6.7: Try These 1-15, Practice 1-18, Extend 20-23
Section 6.8: Explore the Problem 1-6, Investigate Further 8-12
Chapter Assessment 1-27 on page 318

Thursday, 11/8  
Review for Chapter 6 quiz, Work Chapter Review on pages 316-317
Answer any questions from homework
Homework - Cumulative Review 1-25
Fifth take home quiz on Unit 6 due 11/13

Tuesday, 11/13  
Review Units 1-6
Homework – Handout review with sample problems from every section
Read Sections 7.1, 7.2

Thursday, 11/15  
Review Units 1-6; Review homework; Introduce Unit 7

Tuesday, 11/20 and
Thursday, 11/22  
Thanksgiving week; No class; No Homework
Tuesday, 11/27  Sections 7.1, 7.2
   Homework – Read 7.3, 7.4
   Section 7.1: Think Back 1-4, Explore 5-10, Make Connections 15-19
   Section 7.2: Try These 1-10, Practice 1-19, Extend 24-29
   Think Critically 30-33 (grades 9-12)

Thursday, 11/29  Sections 7.3, 7.4
   Homework – Read 7.5, 7.6, 7.7
   Section 7.3: Try These 1-8, Practice 1-17, Extend 19-30
   Think Critically 31-35 (grades 9-12)
   Section 7.4: Try These 1-9, Practice 1-17, Extend 18-28, Mixed Review 35-41
   Think Critically 29-34 (grades 9-12)

Tuesday, 12/4  Sections 7.5, 7.6, 7.7
   Homework – Section 7.5: Try These 1-6, Practice 1-10, Extend 12-15
   Section 7.6: Try These 1-9, Practice 1-29, Extend 31-35, Mixed Review 43-50
   Think Critically 39-42 (grades 9-12)
   Section 7.7: Explore the Problem 1-8, Apply the Strategy 19-29

Thursday, 12/6  Review for Chapter 7 quiz, Work Chapter Review on pages 364-365
   Answer any questions from homework
   Homework - Cumulative Review 1-24
   Sixth take home quiz on Unit 7 due 12/11

Tuesday, 12/11  Review for comprehensive test
   Homework – Review the Chapter Tests for Chapters 1-7

Thursday, 12/13  Review for comprehensive test
   SECOND TAKE HOME TEST ON Units 1-7

We have read the Algebra Syllabus.

Student Signature ________________________________

Parent Signature ________________________________

Date Read ________________________________