Strength in Numbers

The mission of the Jefferson Academy Math Department is to foster critical thinking and logical reasoning through inquiry, investigation, and discovery using mathematical practices.

Course Description:
In this course students will continue their pursuit of formal mathematics. Students will explore algebra beyond its elementary aspects. Topics will include: number sets, real and imaginary numbers, equations and inequalities, linear relations and functions, systems of equations, quadratic relations and functions, exponential and logarithmic functions, polynomials and polynomial functions, statistics and probability and trigonometric functions. Please see the attached schedule for specific dates.

Content Coverage:
Chapter 1: Expressions, Equations, and Inequalities
Chapter 2: Functions, Equations, and Graphs
Chapter 3: Linear Systems
Chapter 4: Quadratic Functions and Equations
Chapter 5: Polynomials and Polynomial Functions
Chapter 6: Rational Functions and Rational Exponents
Chapter 7: Exponential and Logarithmic Functions
Chapter 8: Rational Functions
Chapter 12: Matrices

Classroom Expectations and Policies

Expectations of Students
1. Respect your classmates, school, and your teacher.
2. Be on task.
3. Come to class prepared everyday. Being prepared means:
   a. You have all required supplies (see below) and homework.
   b. You are seated in your desk when the bell rings and ready to work.
   c. You have a positive attitude!

Substitute Policy:
Any student that is reported by a substitute teacher to have been a disruption to the class in any way will automatically be assigned to Friday School.
Tardy Policy:
Students are expected to be present, prepared and in assigned seats before the bell finishes ringing. Students not in their seats at that time are considered tardy. Per school policy, repeated tardiness will result in:

- 1st Tardy - Warning
- 2nd Tardy - Classroom consequence that include but not limited to, wiping down desks, cleaning the classroom whiteboards, and re-shelving class textbooks.
- 3rd Tardy - Phone call home
- 4th Tardy - parent, student and admin meeting at school

Cell Phone Policy:
Cell phones must be placed in the assigned cell phone holder at the beginning of every period. Personal cell phone use will not be allowed at any time during class. This includes phone calls, texts, games, music, and any other apps. Failure to adhere to this policy will result in the phone being confiscated and given to the front office. The phone can be collected after school in accordance with the school-wide cell phone policy. If it happens a second time students will receive Friday school.

Cell phones may NOT be used as calculators.

Food/Drink Policy:
Food is not allowed at any time unless required by a documented medical condition. The only drink allowed is water and must be in a sealed container. Food or unsealable drinks will need to be disposed of before entering the classroom.

Supplies
It is my expectation that you bring the following supplies to class each day.

<table>
<thead>
<tr>
<th>Calculator (TI-84 is recommended)</th>
<th>Pencil(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering paper or Graph paper</td>
<td>Grading pen</td>
</tr>
<tr>
<td>Folder for graded work</td>
<td>Spiral Notebook for notes</td>
</tr>
</tbody>
</table>

BYOD
Students will have on-line access to, and be required to use, Pearson Realize and MathXL. Assignments will be given in these programs throughout the semester and require an internet connected device to be completed. There are no devices available through the school. If a student does not have a device or is unable to borrow one, they will be required to complete their assignments at home.
Grading Policies

All assignments will be graded on a weighted system. Your grade will be based on exams, skills quizzes, and class work. In addition to chapter tests, a comprehensive final exam will be given at the end of the semester.

Grading Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 – 100%</td>
<td>1. Work 5%</td>
</tr>
<tr>
<td>B</td>
<td>80 – 89%</td>
<td>2. Skills quizzes 15%</td>
</tr>
<tr>
<td>C</td>
<td>70 – 79%</td>
<td>3. Assessments 65%</td>
</tr>
<tr>
<td>D</td>
<td>60 – 69%</td>
<td>4. Final 15%</td>
</tr>
<tr>
<td>F</td>
<td>0 – 50%</td>
<td></td>
</tr>
</tbody>
</table>

Grades:

Students who earn an A in this course are exceptional students who meet or exceed the objectives of the course in addition to the expectations in the classroom. They complete their work on time with proficiency, quality, and creativity. They demonstrate an excellent and flexible understanding of the content and persevere through the challenges encountered throughout the course.

Students who earn a B in this course are above average students who meet the objectives of the course in addition to the expectations in the classroom. They complete their work on time with accuracy and demonstrate a solid understanding of the content presented in class.

Students who earn a C in this course are average students who meet the basic objectives of the course and the expectations in the classroom. They complete their work on time and meet minimum expectations.

Students who earn a D or F in this course have not met the objectives of this course or those in classroom.

Work (5% of your grade)

- **Homework**
  Practice problems for current content will be assigned daily in this class and will be due the next day. Assignments will be assigned through MathXL and/or problems from the textbook.

- **Classwork**
  There will be some assignments and projects that will be completed in class. Those will be graded based on participation, completeness and correctness. When appropriate a rubric will be provided.

Skills Quizzes (15% of your grade)

- **Skills Quizzes**
  Students will be given several Skills Quizzes. The Skills Quizzes are based on the essential skills that are required for the student to be successful at the next level of their mathematical career. The math department has collaborated to determine which skills are essential at each level. Skills Quizzes are assessments that students take that are focused on specific skills.

  - **Algebra II Skills Topics:**
    - **Factoring**
      - Quadratics; \( a = \# \),
      - Special cases – difference of squares
      - Cubic
    - **Polynomial Functions**
- Classifying
- Solving
  - Radical Expressions
  - Rational Expressions

  o Each Skills Quiz is worth 10 points.
  o Students have the opportunity to retake Skills Quizzes, as many times they would like in order to improve their grade. Only the highest grade will be recorded.

**Assessments (Tests/Quizzes) (65% of your grade)**

- **Quizzes**
  Quizzes will be given frequently throughout the semester in order to measure students’ understanding of the material.

- **Tests**
  There will be a test at the end of each chapter. Tests may include material from earlier chapters, as well.

**Final Exam (15% of your grade)**

The final includes all material covered over the semester and is given at the end of the semester.

**Grade Replacement**

On the final examination, students will have the opportunity to replace their lowest test score with the score received on the final exam. For example, if a student received a 62% on the Chapter 3 test and then scores a 78% on the final, the 62% will be replaced by the 78%. Grade replacement DOES NOT apply to tests that were not taken.

**Make-up Work**

- **Chapter Work/Classwork**
  - **Excused absences:** You are responsible for obtaining the material covered. Upon returning to school, you have two days to complete missing assignments. Work that is not made up will receive a score of zero.
  - **Late work:** Will be accepted up to the day of the corresponding exam.
  - **Make-up Work:** All make-up work, including work assignments and assessments, are to be completed before or after class. Make-up work may be completed in class only if all current assignments are completed with a passing grade.

- **Assessments**
  - You have until the day before the chapter test to make up any missed quizzes. A quiz that is not made up before the test date will receive a score of zero.
  - You have one week from that date of your return to make up a missed test. A test that is not made up before the deadline will receive a score of zero.
Cheating
Cheating includes, but is not limited to, copying homework, sharing or receiving quiz or test answers, talking during a quiz or test, using unauthorized notes or books during a quiz or test, and turning in another student’s work as your own. The consequences include a zero for that assignment and possible disciplinary action including, but not limited to, lunch detention, Friday School, or suspension.

Extra Help/Office Hours
I am available to help students during the following times:
- **Before school**: Office Hours are Tuesdays, Wednesdays, and Thursdays from 7:40 to 8:15a.m.
- **After school**: By appointment. Please e-mail me or see me after class to determine my availability for a specific day.

**Online Resources**

Assignments
Students will have online access to, and be required to use, Pearson Realize and MathXL. Assignments will be given in these programs throughout the semester and require an internet connected device to be completed.

Class Website
Class website:
[https://jeffersonacademysecondary.jeffcopublicschools.org/academics/teacher_websites/math/thacker](https://jeffersonacademysecondary.jeffcopublicschools.org/academics/teacher_websites/math/thacker)
The website has the following resources organized by the section and chapter in the textbook:
- Class calendar
- Homework assignment & due date
- Link to MathXL
- Link to the on-line textbook
- In class activities or assignments (when applicable)

**Google Classroom**
- Assignments and due dates
- Class notes
- Links to videos
- Links for logins

**Pearson Online Resources**
Each student will be given an online log-in and ID to pearsonrealize.com. The website provides students with
- Access to the online version of the book
- Video of the lessons
- Games to reinforce concepts
- Video tutorials, that allows students to try the concepts and get immediate feedback
- Animated math – Interactive tutorials to explore key concepts and skills.
- Extra practice problems
- Study Guides
- Practice Quizzes/Tests
- Vocabulary flip charts

**Grade Reports**

Grades may be accessed 24/7 on Infinite Campus through the Parent Portal. If you have difficulty logging in, please contact me as soon as possible. Parents may e-mail or call me if they have a concern or question about their child’s progress in this class.

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**Mrs. Thacker’s Algebra II Honors**

Student Name: ________________________________________________

Parent/Guardian Name: _________________________________________

Best way to contact you: _________________________________________

**I have read and understand this course’s expectations and policies. Please sign and date below.**

Student signature: ____________________________________________ Date: __________

Parent/Guardian signature: _____________________________________ Date: __________
## Algebra 2 Honors Schedule

<table>
<thead>
<tr>
<th>Week of:</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/6</td>
<td>NO SCHOOL</td>
<td>Intro/Syllabus/1.1/1.2</td>
<td>1.3/1.4</td>
<td>1.5/1.6</td>
<td>Chapter 1 Test</td>
</tr>
<tr>
<td>1/13</td>
<td>2.1/2.2</td>
<td>2.3/2.4</td>
<td>Chapter 2 Quiz</td>
<td>2.5/2.6</td>
<td>2.7/2.8</td>
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<tr>
<td>1/20</td>
<td>NO SCHOOL</td>
<td>Review</td>
<td>Chapter 2 Test</td>
<td>3.1</td>
<td>3.2</td>
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<tr>
<td>1/27</td>
<td>3.3</td>
<td>Chapter 3 Quiz</td>
<td>3.4</td>
<td>3.5</td>
<td>3.6</td>
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<tr>
<td>2/3</td>
<td>Review</td>
<td>Chapter 3 Test</td>
<td>4.1</td>
<td>4.2</td>
<td>4.3</td>
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<tr>
<td>2/10</td>
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<td>Chapter 4 Quiz</td>
<td>4.5</td>
<td>4.6</td>
<td>4.7</td>
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<tr>
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<td>4.9</td>
<td>Review</td>
<td>Chapter 4 Test</td>
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<tr>
<td>2/24</td>
<td>Factoring Skills Quiz</td>
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<td>5.3</td>
<td>5.4</td>
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<td>Chapter 5 Quiz</td>
<td>5.5/5.6</td>
<td>5.7</td>
<td>5.9</td>
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<tr>
<td>3/9</td>
<td>Review</td>
<td>Chapter 5 Test</td>
<td>Polynomials Skills Quiz</td>
<td>6.1</td>
<td>NO SCHOOL</td>
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<td>3/16</td>
<td>6.2</td>
<td>6.3</td>
<td>6.4</td>
<td>Chapter 6 Quiz</td>
<td>6.5</td>
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<tr>
<td>3/23</td>
<td>SPRING BREAK</td>
<td>NO SCHOOL</td>
<td>6.6</td>
<td>6.7</td>
<td>6.8</td>
</tr>
<tr>
<td>3/30</td>
<td>NO SCHOOL</td>
<td>6.6</td>
<td>6.7</td>
<td>6.8</td>
<td>Review</td>
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<td>4/6</td>
<td>Chapter 6 Test</td>
<td>Radicals Skills Quiz</td>
<td>7.1</td>
<td>7.2/7.3</td>
<td>Chapter 7 Quiz</td>
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<td>4/13</td>
<td>7.4</td>
<td>7.5</td>
<td>7.6</td>
<td>Review</td>
<td>Chapter 7 Test</td>
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<tr>
<td>4/20</td>
<td>8.1</td>
<td>8.2</td>
<td>8.3</td>
<td>Chapter 8 Quiz</td>
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<td>4/27</td>
<td>8.5</td>
<td>8.6</td>
<td>Review</td>
<td>Chapter 8 Test</td>
<td>Rationals Skills Quiz</td>
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<td>5/4</td>
<td>12.1</td>
<td>12.2</td>
<td>12.3</td>
<td>Review</td>
<td>Chapter 12 Quiz</td>
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<tr>
<td>5/11</td>
<td>12.4</td>
<td>12.5</td>
<td>12.6</td>
<td>Review</td>
<td>Chapter 12 Test</td>
</tr>
<tr>
<td>5/18</td>
<td>Review</td>
<td>Review</td>
<td>Finals</td>
<td>Finals</td>
<td></td>
</tr>
</tbody>
</table>

* The instructor reserves the right to adjust the syllabus at any time.