Mt. San Jacinto College
Menifee Valley Campus
Fall 2013

Syllabus

Mathematics 96 (3585)
Intermediate Algebra

Room 652
7:50A – 9:20A  MWF

Guide: Paul Hert

Office: 608A

Student Conference Hours: MWF 10:50A - 11:50A
M 11:50A–1:50P
or by appointment

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Instructor Website: www1.msjc.edu/math/phert


ISBN: 978-1-932628-48-7 (with software, which is optional)

Course Description

The second course in the algebra sequence, Mathematics 096 prepares the student for Mathematics 102, 105, 115 or 140. The successful Mathematics 096 student can distinguish between members of the natural, whole, integer, rational, real and complex number sets, solve quadratic, rational, absolute value and radical equations, related applications and inequalities, factor polynomials, graph quadratic and square root expressions as well as simplify expressions containing radicals or rational exponents. This student can also evaluate function notation, utilize the vertical line test, determine the domain and range of a function from its graph, compare equations of conic sections and construct their graphs, graph exponential functions and formulate their logarithmic equivalents.
Course Objectives

Upon successful completion of this course, the student will be able to do the following:

1. Distinguish between members from the sets of natural, whole, integer, rational, real and complex numbers (1.2);

2. Solve quadratic (7.1, 7.2), rational (5.4), absolute value (1.4) and radical (6.4) equations;

3. Solve quadratic (7.3) and rational (5.5) applications;

4. Solve quadratic inequalities and absolute value inequalities of the form |ax + b| > n, |ax + b| < n, |ax + b| ≤ n and |ax + b| ≥ n, where n can be positive, negative or zero (1.7);

5. Factor polynomials of the form u³ + v³ and u³ − v³ where u = ax and v = cx (4.7);

6. Simplify complex fractions (5.3);

7. Graph quadratic functions (7.5);

8. Simplify expressions containing integer (4.1) and rational (6.2) exponents and radical expressions (6.3);

9. Evaluate function notation (2.4, 9.1) and utilize the Vertical Line Test (2.4);

10. Determine the domain and range of a function given its graph (2.4);

11. Solve a system of three equations in three variables (3.3);

12. Write the square root of a negative radicand utilizing a factor of i (6.6);

13. Graph exponential functions (8.3); Convert logarithmic form to exponential form (8.4);

14. Graph equations of circles (9.3) and ellipses (9.4)

(NOTE: Decimals in parentheses above that follow a course objective correspond to text section(s) containing content for that objective.)

CLO (Course Learning Outcome)

1. Completely factor a trinomial with GCF >1 and resulting leading coefficient >1.

2. Use the quadratic formula to solve a quadratic equation.

3. Rewrite a quadratic function of the form y = ax² + bx + c in the form y = a(x − h)² + k where a > 1 and h and k are whole numbers.
Attendance Policy

You WILL be dropped after missing the equivalent of five (5) full class meetings.

The attendance policy will be enforced beginning 26 August 2013. If you arrive to class after it is scheduled to begin, you are late and will be considered absent for one-half (1/2) of a full class meeting. If you leave class before the instructor has dismissed the class, you will be considered absent for one-half (1/2) of one full class meeting.

If you know ahead of time that you will be late for class or must leave class early, please notify the instructor before doing so. Please sit near an exit if you must leave early.

The purpose of the attendance policy is to ensure student success and help reduce disruptions to the learning environment. Students who arrive to class late or leave early create distractions for both the instructor and fellow students. By removing those students who would otherwise enter class late or leave class early, enforcement of the attendance policy will help ensure a classroom environment suitable for the successful study of mathematics.

Classroom Behavior

As a courtesy to fellow students as well as the instructor, you should remain quiet during class time unless you are asking the instructor a question or answering a question posed by the instructor. If you are disrupting the class, you will be given only one warning. If you disrupt the class again, you will be excused from class for the remainder of the day. If you are excused from class, you will be considered absent for one full class meeting.

As is the case with the attendance policy, the purpose of the classroom behavior policy is to help reduce disruptions to the classroom environment. Classroom disruptions include, but are not limited to, speaking to anyone other than the instructor during class time and interrupting the instructor or a fellow student while that individual is speaking.

You should silence cellular phones and pagers before class begins. NO TEXTING DURING CLASS!

Accessibility

Mt. San Jacinto College abides by the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973 that prohibits federal and state agencies or programs from discriminating against qualified individuals with disabilities. If you have a documented disability that limits major life activity which may have some impact on your work in this class and for which you may require accommodations, please notify the Disabled Students Program and Services.
**Academic Support**

Academic support is available for all students through the services provided in each campus learning resource center. Inquire at each center regarding hours of operations and specific subjects for which tutors are available. In addition, some subject area specialist tutors are available for courses through specific departments. Ask your instructor if specialized tutors are available for your individual course.

**Your Course Grade**

The scores you earn on five (5) homework assignments, ten (10) flashcards, three (3) CLO quizzes, six (6) class addenda, four (4) tests and a final examination will determine your course grade. The points possible for each of these items is as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Points Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>50</td>
</tr>
<tr>
<td>Tests</td>
<td>400</td>
</tr>
<tr>
<td>Final Examination</td>
<td>225</td>
</tr>
<tr>
<td>Class Addenda</td>
<td>30</td>
</tr>
<tr>
<td>Flash Cards</td>
<td>10</td>
</tr>
<tr>
<td>CLO quizzes</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>730</strong></td>
</tr>
</tbody>
</table>

Course grades will be determined utilizing the following scale:

<table>
<thead>
<tr>
<th>Course Grade</th>
<th>Points Earned</th>
<th>Percentage(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>657 - 730</td>
<td>90 - 100</td>
</tr>
<tr>
<td>B</td>
<td>584 - 656</td>
<td>80 - 90</td>
</tr>
<tr>
<td>C</td>
<td>511 - 583</td>
<td>70 - 80</td>
</tr>
<tr>
<td>D</td>
<td>438 - 510</td>
<td>60 - 70</td>
</tr>
<tr>
<td>F</td>
<td>0 - 437</td>
<td>0 – 60</td>
</tr>
</tbody>
</table>

**Examinations**

There will be four one-hour tests and a two-hour final examination. The four tests and final examination will be written examinations consisting primarily of exercises comparable in difficulty to those included in the homework assignment list and class addenda. You may also be asked to provide information contained on your flashcards. You must show all your work to a
solution to receive full credit for that exercise. Partial credit will be given for a partial solution. The final examination will be comprehensive.

You may use a scientific calculator when taking the tests or final examination. However, you are not allowed to share a calculator during an exam. If your calculator stops working during an exam, please notify the instructor. **You may not use a graphing or symbolic logic calculator during exams.** Cell phones must be placed under your desk during exams.

You may not use books or notes when taking any examination. If you take all four tests, and your final examination percentage is greater than your lowest test score, your lowest test score will be replaced by your final examination percentage.

It is the instructor's intent to provide complete solutions when graded tests are returned. When this occurs, **it is important to compare your answers with those of the solutions immediately.** If you have questions regarding your test score or how a particular solution was graded, you must ask the instructor **before leaving the classroom.** Once you have left the classroom, the test score is permanent.

**If you miss a test …**

If you miss a test, the score for that test will equal your final examination percentage. If you miss a test, you will be considered absent for one (full) class meeting.

**If you miss another test …**

If you miss two tests, the score for the first test missed will equal your final examination percentage. If you have scored at least 70% on at least one test, you will be offered a make-up test for the second missed test. If you have yet to score 70% or better on a test, you will score zero points for the second missed test. If you miss two tests, you will be considered absent for two (full) class meetings.

**If you miss three (or more) tests…**

If you miss a third test, you will score zero points for that test. If you miss the fourth test, you will score zero points for that test as well. If you miss three tests, you will be considered absent for three (full) class meetings. If you miss four tests, you will be considered absent for four (full) class meetings.

**If you miss the final examination…**

If you do not take the final examination, you probably won't earn a grade better than "D" for the course. Therefore, if you miss the final examination, you should contact enrollment services to obtain an incomplete grade application form and arrange to meet with the instructor as soon as possible. **It is the student's responsibility to initiate the process to apply for an incomplete grade.**
## Examination Schedule

<table>
<thead>
<tr>
<th>Test</th>
<th>Day and Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Friday, 6 September</td>
</tr>
<tr>
<td>II</td>
<td>Wednesday, 9 October</td>
</tr>
<tr>
<td>III</td>
<td>Wednesday, 6 November</td>
</tr>
<tr>
<td>IV</td>
<td>Monday, 9 December</td>
</tr>
</tbody>
</table>

**Final Examination:** ______day, ___ December 2013, ____:____ - ____:____

Make sure to save your tests and the solutions so you can use them to study for the comprehensive final examination, and for reference material in subsequent courses.

## Cheating

If you are caught cheating on a test or on the final examination, you will receive a score of zero points for that examination. Further disciplinary action may be taken.

## Taking Notes: Writing and Watching

It is important to take notes during class. It is particularly important to make detailed notes as problems similar to those you'll be doing for homework are worked in class. That way, you can refer to your notes for help if you forget how to complete a solution to a homework problem. It is also important to watch, without taking notes, as a problem is worked from start to finish. That way, you'll be certain that you know and understand all steps necessary for a complete solution. You should take notes for all problems introduced during the classroom discussion, use these notes to do your homework *before the next class meeting*, and then watch, without taking notes, as solutions to homework problems are presented at the beginning of the next class meeting.

As an andrological tool, your instructor will utilize whiteboard pens of different colors. For example, when solving an equation, your instructor will often use one color to write the equation and another color to do the "same thing" to both sides of the equation. In this manner, the necessary steps in a problem's solution are emphasized. Therefore, you may find it helpful to use at least two colors when taking notes. That way, if you mimic the instructor's use of color, you will quickly remember and understand the steps utilized in a solution when you later use your notes to do your homework or study for an exam.
**Homework**

The homework assignment list is attached. Note that homework is assigned each class meeting, unless there is a test.

Your understanding of the day's concepts, exercise instructions and vocabulary, as well as your recollection of the steps necessary to successfully complete the related homework exercises, will probably decrease with time. Therefore, it is important to do the homework assigned for a class meeting as soon after that class meeting as possible.

To be successful in the course, you must pass the examinations. To prepare for an examination, you should complete your homework in a timely fashion and review those problems associated with the material over which you will be tested. So that you can complete your homework, you should prepare for class. To prepare for each class meeting, you should study the examples and memorize the definitions and theorems in the text section(s) to be covered that day. This will prepare you to contribute to the class discussion. Specifically, if after memorizing the definitions and theorems you cannot understand the solutions to example exercises in the text, you will be better prepared to ask meaningful questions when the instructor solves similar exercises in class. Then, you should have a better understanding of how to do your homework. Remember, no matter how simple an exercise solution appears as your instructor presents it in class, you won't have an accurate estimate of the mathematics you can do *yourself* until you try the homework!

The homework assignment list represents the *minimum* homework you should complete as you study the course material. Depending on your mathematics background and the concept in question, you may need to do additional problems. Please see the instructor, in class or during an office hour, if you feel you need to attempt additional problems. You should also see the instructor to verify that the answers to even-numbered problems you have attempted are correct or if you have any other course-related questions.

If you find yourself struggling to complete a homework assignment before the next class meeting, you are encouraged to contact the instructor during an office hour for extra help. You may also wish to employ a tutor, either privately or through the tutoring centers on campus (in the LRC (library, building 800)), or form a study group of your peers.

Since test problem instructions will be very similar to those of the exercises in the homework assignment list, doing all your homework is the best way to prepare for an examination. In particular, to ensure that you will understand test problem instructions, you should work exercises in the text until you are confident that you understand how to successfully complete exercises with those instructions. *Similar-looking problems with different instructions typically have different answers!*

**IMPORTANT:** So that you can successfully complete test questions, you should be able to complete homework exercises *without the use of notes or the text, before you take the test!*

Homework will be collected on the following dates:

- 6 September
- 25 September
- 9 October
- 25 October
- 6 November
- 27 November
- 9 December

There will be a total of seven (7) homework assignments. **No late homework will be accepted.** However, the two lowest homework scores will be dropped. If you fail to turn in a homework assignment, you will receive zero (0) points for that assignment. Since each assignment will be worth ten (10) points, there will be a total of fifty (50) points possible from homework this semester.

Each homework assignment will consist of three (3) problems from the Homework Assignment List. Homework must be turned in on standard size (8.5” x 11” or 8” x 10.5”) paper. If separate sheets are turned in, please fold them length-wise. If your homework is permanently bound, please fold the top corner of each page that contains instructions or work for each exercise that is to be graded.

Each homework assignment will be graded as follows:
One (1) point for turning in your homework;
Three (3) points for writing the instructions to the exercises and writing the exercises themselves (one (1) point for each of the three problems to be graded);
Six (6) points for correct and complete solutions to the problems (two (2) points for each of the problems to be graded). Partial credit (one (1) point per problem) will be given for a partial solution. The answer, by itself, is worth zero (0) points, unless there is absolutely, positively no work to show!

When homework is collected, your guide will ask you to remove everything from your desktop except for your homework. He will write the three exercises to be collected on the whiteboard. You will bring these exercises, including the exercise instructions, the exercise statements (the “problems”) themselves and all associated work, to the front of the room. Writing instruments will be provided so that you can write your name on your homework.

A homework assignment may contain any problem from the Homework Assignment List, provided the problem is contained in a text section already covered in class. For example, any homework assignment might contain a problem from a text section covered the first week of class! Therefore, **bring all your homework with you each time a homework assignment is collected!**

Be sure to check the answers to odd-numbered problems in the back of the text before submitting your homework.
IMPORTANT:

You will receive zero (0) points for a homework assignment that is turned in late (that is, after the end of the class meeting in which it is collected.)

You will receive zero (0) points for a homework problem if any of the following are true:

You do not use 8.5" x 11" or 8" x 10.5" paper;

You do not bend the corner of each page that contains work for a particular problem (applies only if your homework is permanently bound).

Flashcards

You are to construct a flashcard for each term, definition, theorem or property below. On one side of the card write the term name, or the name of the theorem or property as provided in the following list. To facilitate turning in your flashcards, as well as making them useful for study in this course, include the section number, page and section title on this side. On the other side provide a complete term definition, the complete theorem statement or the complete property formula.

In the same manner as the homework assignments, fifteen (15) flashcards will be collected. From the list that follows, five (5) flashcards will be collected on each of the following dates:

6 September
9 October
6 November

You may not turn in flashcards late. However, your lowest flashcard score will be dropped. Each card is worth one (1) point. Surround your flashcards with a rubber band (or two) and write your name on the top flashcard before you submit them.

Flashcards must be 3” x 5” or 4” x 6” index cards (not cut from pieces of notebook (thin) paper).
Flashcards should be constructed for all of the following terms, definitions, theorems or properties:

- **Natural Numbers** (p. 8)
- **Whole Numbers** (p. 8)
- **Integers** (p. 8)
- **positive integers** (p. 8)
- **negative integers** (p. 8)
- **Rational Numbers** (p. 9)
- **Irrational Numbers** (p. 9-11)
- **real number line** (p. 13)
- **variable** (p. 9)
- **real number line** (p. 13)
- **set** (p. 14)
- **empty set** (p. 14)
- **set-builder notation** (p. 15)
- **inequality symbols** (p. 15)
- **Commutative Law, +** (p. 18)
- **Commutative Law, ∙** (p. 18)
- **Associative Law, +** (p. 18)
- **Associative Law, ∙** (p. 18)
- **Identity, +** (p. 19)
- **Identity, ∙** (p. 19)
- **Inverse, +** (p. 19)
- **Inverse, ∙** (p. 19)
- **Zero Factor Law** (p. 18)
- **Distributive Property** (p. 18)
- **Trichotomy Property** (p. 20)
- **Transitive Property** (p. 20)
- **Absolute Value** (p. 25)
- **Solution Set** (p. 26)
- **Rule for Subtraction with Real Numbers** (p. 28)
- **Rules for Dividing Positive and Negative Real Numbers** (p. 32)
- **division by zero is undefined** (p. 32)
- **Rules for Order of Operations** (p. 33)
- **term** (p. 39)
- **constant** (p. 39)
- **coefficient** (p. 39)
- **like terms** (p. 39)
- **combining like terms** (p. 40)
- **algebraic expression** (p. 41)
- **equation** (p. 41)
- **solution** (p. 41)
- **solution set** (p. 41)
- **linear equations in x** (p. 41)
- **Addition Property of Equality** (p. 42)
- **Multiplication Property of Equality** (p. 42)
- **equivalent equations** (p. 42)
- **conditional equation** (p. 45)
- **identity** (p. 45)
- **contradiction** (p. 45)
- **type of equation/number of solutions** (p. 45)
- **solving absolute value equations** (p. 46)
- **two absolute values** (p. 47)
- **formula** (p. 51)
- **formula/figure name/figure** (p. 52)
- **evaluating formulas** (p. 53)
- **solving formulas** (p. 53)
- **strategy for solving word problems** (first one) (p. 58)
- **addition/subtraction/multiplication/division/equality** (one card each for all five, p. 59)
- **average** (p. 65)
- **interval of real numbers** (p. 72)
- **type of interval/algebraic notation/interval notation/graph** (one card each for all five, p. 72,73)
- **linear inequalities** (p. 74)
- **rules for solving linear inequalities** (p. 75)
- **note for solving compound inequalities** (p. 79)
- **algebraic notation/graph/interval notation** (p. 79)
- **solving absolute value inequalities** with <, ≤ (p. 80)
- **algebraic notation/graph/interval notation** (p. 81)
- **note for solving "or" absolute value inequality** (p. 81)
- **solving absolute value inequalities** with >, ≥ (p. 82)
- **factor** (noun; p. 88)
- **Prime Numbers** (p. 88)
- **composite numbers** (p. 88)
- **exponents** (p. 88)
- **multiples** (p. 89)
- **finding the LCM** (p. 89)
- **real numbers** (p. 89)
- **Cartesian Coordinate System** (draw xy-plane picture at bottom of p. 105)
- **solution set of an equation in two variables** (p. 107)
- **Standard form of Linear Equation** (p. 108)
- **to graph a linear equation in two variables** (p. 109)
- **x- and y-intercepts** (p. 110,111)
- **slope** (p. 118-120)
- **horizontal line slope** (p. 123,124)
- **vertical line slope** (p. 123,124)
- **Slope-Intercept Form** (p. 126)
- **Point-Slope Form** (p. 135)
- **Finding Equation of a Line** (p. 137)
- **parallel and perpendicular lines** (p. 138)
- **summary of line formulas and properties** (p. 140)

**List continues on following page...**
Relation, Domain and Range (p. 144)  Function (p. 145)  Vertical Line Test (p. 146)
Linear Function (p. 149)  note for domains of non-linear functions (p. 150)
Function Notation (p. 151)  System of Equations (p. 192)
Consistent/Inconsistent/Dependent (system/graph/intersection/classification..one card each for all three, p. 193)  solve a system of linear equations by substitution (p. 196)
solve a system of linear equations by addition (p. 198)  solution to 3x3 linear system (p. 212)
to solve a system of three linear equations in three variables (p. 214)
exponential notation (exponent/base, p. 280)  Product Rule for exponents (p. 281)
the exponent zero (p. 281)  Quotient Rule for exponents (p. 282)
rule for negative exponents (p. 284)  note regarding negative exponents (p. 284)
Power Rule for Fractions (3., p. 285)  note for negative exponents and fractions (p. 287)
summary of properties and rules for exponents (p. 288)
Monomial (p. 296)  Polynomial (include "degree", p. 297)
classification of polynomials (p. 297)  evaluation of P(x) (include all **bold** print, p. 300)
FOIL (p. 307)  difference of two squares (p. 309)  perfect square trinomials (p. 310)
note for COMMON ERROR (squaring binomials) (p. 311)  The Division Algorithm (p. 316)
product/factors (p. 323)  factoring (verb, p. 323)  Greatest Common Factor (GCF, p. 323)
Factoring Out the GCF (p. 323)  completely factored expression (p.. 324)
factoring by grouping (include all **bold** print, p. 325)
factoring a trinomial with leading coefficient one (find the **bold** print, p. 330)
note for factoring (p. 331)
factoring a trinomial with leading coefficient other than one (p. 331)
alanalysis of factoring by the ac-method (write SMALL and include the example too, p. 334)
note (completely factoring polynomials) ("Summary Note", p. 337)  sum of two squares (p. 341)
factoring a sum of cubes (p. 343)  factoring a difference of cubes (p. 343)
Quadratic Equations (p. 348)  Zero-Factor Property (p. 349)
Factor Theorem (don't include the "proof", p. 353)  consecutive integers (p. 354)
consecutive even integers (p. 354)  consecutive odd integers (p. 354)
The Pythagorean Theorem (p. 356)  rational expression (p. 386)
summary of arithmetic rules for rational numbers (fractions) (p. 388)
The Fundamental Principle of Rational Expressions (p. 388)
opposites in rational expressions (p. 389)
note COMMON ERRORS (reducing rational expressions) (p. 390)
multiplying rational expressions (p. 390)  multiplication with rational expressions (p. 391)
division with rational expressions (p. 391)  adding rational expressions (p. 397)
to find the LCM for a set of polynomials (p. 398)
procedure for adding rational expressions with different denominators (p. 398)
placement of negative signs (in a rational expression) (p. 400)
subtracting rational expressions (p. 400)
notes COMMON ERROR (subtracting rational expressions) (p. 402)
complex fraction (p. 408)  simplifying complex fractions (first method) (p. 408)
simplifying complex fractions (second method) (p. 410)  ratio (p. 413)  proportion (p. 413)
similar triangles (p. 416)  to solve an equation containing rational expressions (p. 417)

**List concludes on following page**...(FINALLY!)...
strategy for solving word problems (second one) (p. 425)
problems related to work (include **bold** text, p. 426) finding a square root (p. 463)
radical terminology (p. 463) Principal Square Root (versus negative square root, p. 463)
Square Root (p. 464) note (non-real, imaginary numbers, p. 465)
properties of square roots (p. 467) simplest form (for a square root, p. 467)
square root $x^2$ (p. 470) square roots of expressions with even/odd exponents (p. 471)
cube root (p. 472) simplest form (of a cube root, p. 473)
type of root/radical and exponent notation (one card each for all four, p. 477)
radical notation (p. 478) notes (special notes about the index n) (p. 478)
the general form $a^{m/n}$ (p. 481) like radical (terms) (p. 489)
rationalize the denominator (p. 491)
to rationalize a denominator containing a square or cube root (p. 492) conjugates (p. 493)
to rationalize a denominator containing a sum or difference involving square roots (p. 493)
extaneous solution (all **bold** text, p. 500) method for solving radical equations (p. 500)
note (potential radical equation extraneous solutions) (p. 503)
radical function (p. 507) $i$ and $i^2$ (p. 517) $\sqrt{-a} = \sqrt{a} i$ (p. 517)
to solve an equation by factoring (p. 549) square root property (p. 552)
completing the square (p. 553)
to solve a quadratic equation by completing the square (p. 554)
The **Quadratic Formula** (p. 562) Discriminant (sign)/nature of solutions (p. 565)
strategy for solving word problems (third one) (p. 570) parabola (p. 588)
vertex (p. 588) line (axis) of symmetry (p. 588) Quadratic Function (p. 588)
vertical shift/translation for a parabola ( $y = ax^2 + k$ ) (p. 590)
horizontal shift/translation for a parabola ( $y = a(x - h)^2$ ) (p. 591)
functions of the form $f(x) = a(x - h)^2 + k$ and $f(x) = ax^2 + bx + c$ (include all **bold** text, p. 593) minimum and maximum values (of a quadratic function) (p. 598)
Exponential Function (p. 669) horizontal asymptote (for an exponential function) (include a sample graph, p. 671, 672)
general concepts of exponential functions (p. 673) Compound Interest (p. 674)
Definition of Logarithm (base a) (p. 684) The **Distance Formula** (p. 771)
Circle, Center, Radius, Diameter (include a sample graph, p. 773)
Equation of a Circle (p. 774) Ellipse (include a sample graph, p. 782)
Equation of an Ellipse (p. 784)

**THE END** (for flashcards, at least)!!
**Class Addenda (CAs)**

A total of seven (7) class addenda (CAs) will be assigned. **No late CAs will be accepted** but only the best six (6) scores will count toward your course grade. Each CA will be worth five (5) points. Each CA will contain example exercises for each different exercise group. Partial credit will be awarded based on the amount of work successfully completed. Typically you will have two (2) weeks to complete each CA. They will be due as follows:

<table>
<thead>
<tr>
<th>CA</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>30 August</td>
</tr>
<tr>
<td>Two</td>
<td>13 September</td>
</tr>
<tr>
<td>Three</td>
<td>27 September</td>
</tr>
<tr>
<td>Four</td>
<td>18 October</td>
</tr>
<tr>
<td>Five</td>
<td>1 November</td>
</tr>
<tr>
<td>Six</td>
<td>22 November</td>
</tr>
<tr>
<td>Seven</td>
<td>11 December</td>
</tr>
</tbody>
</table>

Completed sample versions of each CA are available at the instructor's website.

**CLO Quizzes**

There will be three (3) CLO quizzes, worth a maximum of five (5) points each. Partial credit will be given for a partial solution. **You may not take any CLO quiz early or late.** Quizzes are scheduled as follows:

- 23 October
- 2 December
- 6 December

See page two (2) for the specific content of each quiz.

**Determining Your Current Course Grade***

<table>
<thead>
<tr>
<th>Item</th>
<th>Your Score</th>
<th>Total Points Earned**</th>
<th>Your Percentage***</th>
<th>Your Current Course Grade****</th>
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<tbody>
<tr>
<td>CA 1</td>
<td>_________</td>
<td>___________</td>
<td>_____/5 x 100 = ___</td>
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</tr>
<tr>
<td>Test I</td>
<td>_________</td>
<td>___________</td>
<td>____/105 x 100 = ___</td>
<td>___________</td>
</tr>
<tr>
<td>Homework Assignment 1</td>
<td>_________</td>
<td>___________</td>
<td>____/115 x 100 = ___</td>
<td>___________</td>
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</tbody>
</table>
Flashcards 1 _______ _________ ______/120 x 100 = ______ _________
CA 2 _______ _________ ______/125 x 100 = ______ _________
Homework Assignment 2 _______ _________ ______/135 x 100 = ______ _________
CA 3 _______ _________ ______/140 x 100 = ______ _________
Test II _______ _________ ______/240 x 100 = ______ _________
Homework Assignment 3 _______ _________ ______/250 x 100 = ______ _________
Flashcards 2 _______ _________ ______/255 x 100 = ______ _________
CA 4 _______ _________ ______/260 x 100 = ______ _________
CLO 1 _______ _________ ______/265 x 100 = ______ _________
Homework Assignment 4 _______ _________ ______/275 x 100 = ______ _________
CA 5 _______ _________ ______/280 x 100 = ______ _________
Test III _______ _________ ______/380 x 100 = ______ _________
Homework Assignment 5 _______ _________ ______/390 x 100 = ______ _________
Flashcards 3 _______ _________ ______/390 x 100 = ______ _________
CA 6 _______ _________ ______/395 x 100 = ______ _________
Homework Assignment 6 _______ _________ ______/395 x 100 = ______ _________
CLO 2 _______ _________ ______/400 x 100 = ______ _________
CLO 3 _______ _________ ______/405 x 100 = ______ _________
Test IV _______ _________ ______/505 x 100 = ______ _________
Homework Assignment 7 _______ _________ ______/505 x 100 = ______ _________
* Your lowest test score will be dropped and replaced with your final examination percentage, should your lowest test score be less than your final examination percentage. Therefore, the current course grade in the table above is only an approximation of your final course grade.

** To compute your total points accumulated to date, add the entries in the "Your Score" column. Since your two (2) lowest homework assignment scores will be dropped, include only your five (5) highest homework assignment scores, two (2) highest flashcard scores and six (6) highest CA scores.

*** To compute your percentage, divide the number of total points accumulated (see **) by the total number of points possible (provided for you in each denominator) and multiply by 100.

**** To determine your current course grade, compare your percentage to the percentages found on page 4 of the syllabus.

---

** Drop Dates **

The last day to drop a full-term course without a "W" grade issued is 8 September 2013.
The last day to drop a full-term course with a "W" grade issued is 22 November 2013.
While the attendance policy permits the instructor to drop a student (before November 22nd), it is the student's responsibility to drop a course if he or she no longer wishes to be enrolled in that course. Contact Enrollment Services if you wish to obtain an add/drop slip.
Success Checklist

If you are not doing as well as you'd like in the course, ask yourself the following questions:

"Am I getting to class on time?"

"Am I attending every class meeting?"

"Am I staying for the entire class meeting?"

"Am I taking notes for one problem and then watching, without taking notes, as a similar problem is explained?"

"Am I completing my homework before the next class meeting?"

"If I am not able to complete my homework before the next class meeting, am I getting extra help (from the instructor, a classmate, a tutor, etc.)?"

"Am I reading the text sections to be covered at the next class meeting before attending that meeting?"

“Am I spending at least 3 hours outside of class (doing homework, reading the text, studying class notes, getting help from the instructor or a tutor) for every hour spent inside the classroom?”

“Am I using materials from the previous course to help refresh my knowledge?"

If the answer to any of these questions is "no", your performance should improve as you change each "no" to a "yes"!

**NOTE:** Save all materials from this course (text, class notes, class addenda, homework, tests, test solutions, flashcards) for use in the next course.
Math 96 (3585)  
Homework Assignment List and Tentative Calendar  
Fall 2013  

**NOTES:** “e.o.o.” means “every other odd.” For example, “1 – 37 e.o.o.” would correspond to the exercises 1,5,9,13,17,21,25,29,33 and 37. Unless noted otherwise (with an asterisk, *, in which case do the exercise w/o using a graphing calculator), if an ENTIRE exercise requires use of a graphing calculator/computer algebra system, you may skip it. Otherwise, just do the "non-graphing calculator/non-computer algebra system" parts of the exercises below.

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Text Section</th>
<th>Topic</th>
<th>Homework Exercises</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>8/19</td>
<td>1.2</td>
<td>Intro. to Real Numbers</td>
<td>1 – 15 odd, 19– 29 odd</td>
</tr>
<tr>
<td>W</td>
<td>8/21</td>
<td>1.2</td>
<td>Intro. to Real Numbers</td>
<td>31 – 79 odd</td>
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<tr>
<td>F</td>
<td>8/23</td>
<td>1.3</td>
<td>Operations with Reals</td>
<td>1 – 51 odd, 59, 61, 67 – 87 odd, 95*,97*</td>
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<tr>
<td>M</td>
<td>8/26</td>
<td>1.4</td>
<td>Linear Eqns One Variable</td>
<td>1 – 69 e.o.o, 71 - 81 odd</td>
</tr>
<tr>
<td>W</td>
<td>8/28</td>
<td>1.5</td>
<td>Evaluating, Solving Formulas</td>
<td>1 – 55 odd</td>
</tr>
<tr>
<td>F</td>
<td>8/30</td>
<td>1.6</td>
<td>Applications</td>
<td>1 – 33 e.o.o.</td>
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</table>

**CA #1 due**

<table>
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<th>Text Section</th>
<th>Topic</th>
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<tbody>
<tr>
<td>M</td>
<td>9/2</td>
<td>HOLIDAY!</td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>9/4</td>
<td>1.7</td>
<td>Inequalities One Variable</td>
</tr>
<tr>
<td>F</td>
<td>9/6</td>
<td>1.7</td>
<td>Test I (1.2 - 1.6)</td>
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</table>

**Homework #1 due (through 1.6)**  
**Flashcards #1 (through p. 65)**

<table>
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<th>Date</th>
<th>Text Section</th>
<th>Topic</th>
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<tr>
<td>M</td>
<td>9/9</td>
<td>1.7</td>
<td>Inequalities One Variable</td>
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<tr>
<td>W</td>
<td>9/11</td>
<td>2.1</td>
<td>Cart. Coords;Linear Eqns</td>
</tr>
<tr>
<td>F</td>
<td>9/13</td>
<td>2.2</td>
<td>y = mx + b</td>
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**CA #2 due**
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<th>Day</th>
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<th>Text</th>
<th>Page</th>
<th>Topic</th>
<th>Homework Exercises</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>9/16</td>
<td>2.3</td>
<td>141</td>
<td>( y - y_1 = m(x - x_1) )</td>
<td>1 – 25 odd</td>
</tr>
<tr>
<td>W</td>
<td>9/18</td>
<td>2.3</td>
<td>141</td>
<td>( y - y_1 = m(x - x_1) )</td>
<td>27 - 41 odd, 45,47,49</td>
</tr>
<tr>
<td>F</td>
<td>9/20</td>
<td>2.4</td>
<td>158</td>
<td>Intro. to Functions</td>
<td>1 – 27 odd</td>
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<tr>
<td>M</td>
<td>9/23</td>
<td>2.4</td>
<td>158</td>
<td>Intro. to Functions</td>
<td>29 - 43 odd</td>
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<tr>
<td>W</td>
<td>9/25</td>
<td>3.1</td>
<td>201</td>
<td>2x2 Linear Systems</td>
<td>1, 5 – 21 e.o.o., 23 - 41 odd</td>
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</table>

**Homework #2 due (through 2.3)**

| F    | 9/27  | 3.2   | 207  | Applications             | 1, 13, 17                           |

**CA #3 due**

| M    | 9/30  | 3.3   | 220  | 3x3 Linear Systems       | 1 – 17 odd                          |
| W    | 10/2  | 4.1   | 292  | Integer Exponents       | 1 – 31 odd                          |
| F    | 10/4  | 4.1   | 292  | Integer Exponents       | 33 – 63 odd                         |
| M    | 10/7  | 4.2   | 302  | Add,Sub. Polys          | 1 – 45 e.o.o., 47 - 55 odd          |
|      |       | 4.3   | 312  | Mult. Polys             | 1 - 65 e.o.o.                       |

| W    | 10/9  |       |      | Test II (1.7, 2.1 – 2.4, 3.1, 3.2, 3.3, 4.1) |

**Homework #3 due (through 4.1)**

| F    | 10/11 | 4.4   | 320  | Division of Polys       | 1 – 39 odd                          |
| M    | 10/14 | 4.5   | 327  | Intro. to Factoring     | 1 – 35 odd                          |
|      |       | 4.6   | 337  | Factoring Trinomials    | 1 - 41 odd                          |

| W    | 10/16 | 4.7   | 345  | Special Factoring       | 1 - 75 odd                          |
| F    | 10/18 | 4.8   | 357  | Poly Eqns., Apps.       | 1 – 47 odd, 59,61,67,69             |

**CA #4 due**
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<th>Day</th>
<th>Date</th>
<th>Text Section</th>
<th>Page</th>
<th>Topic</th>
<th>Homework Exercises</th>
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<td>10/21</td>
<td>5.1</td>
<td>394</td>
<td>Mult, Div. Rat'l Exps.</td>
<td>1 – 73 e.o.o</td>
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<tr>
<td></td>
<td></td>
<td>5.2</td>
<td>405</td>
<td>Add, Sub. Rat'l Exps.</td>
<td>1 - 57 odd</td>
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<td>W</td>
<td>10/23</td>
<td>5.3</td>
<td>411</td>
<td>Complex Fractions</td>
<td>1 – 35 odd</td>
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<td>CLO Quiz 1</td>
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<td>F</td>
<td>10/25</td>
<td>5.4</td>
<td>420</td>
<td>Rational Equations</td>
<td>1 – 21 e.o.o., 23 - 57 odd</td>
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<td><strong>Homework #4 due (through 5.2)</strong></td>
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<tr>
<td>M</td>
<td>10/28</td>
<td>5.5</td>
<td>432</td>
<td>Applications</td>
<td>1 – 25 odd</td>
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<td>W</td>
<td>10/30</td>
<td>6.1</td>
<td>474</td>
<td>Roots and Radicals</td>
<td>11 – 59 odd</td>
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<td>F</td>
<td>11/1</td>
<td>6.2</td>
<td>486</td>
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<td>1 – 23 odd, 41 - 89 odd</td>
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<td><strong>CA #5 due</strong></td>
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<td>M</td>
<td>11/4</td>
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<td>Review</td>
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<tr>
<td>W</td>
<td>11/6</td>
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<td><strong>Test III (4.2 - 4.8, 5.1 - 5.5, 6.1, 6.2)</strong></td>
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<td><strong>Homework #5 due (through 6.2)</strong></td>
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<td><strong>Flashcards #3 (through p. 481)</strong></td>
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<td>F</td>
<td>11/8</td>
<td>6.3</td>
<td>497</td>
<td>Operations with Radicals</td>
<td>1 – 45 odd</td>
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<tr>
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<td>11/11</td>
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<td>W</td>
<td>11/13</td>
<td>6.3</td>
<td>497</td>
<td>Operations with Radicals</td>
<td>47 – 83 odd</td>
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<td>6.4</td>
<td>505</td>
<td>Equations with Radicals</td>
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<td>M</td>
<td>11/18</td>
<td>6.5</td>
<td>513</td>
<td>Functions with Radicals</td>
<td>1 – 25 odd</td>
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<td>6.6</td>
<td>522</td>
<td>Complex Numbers</td>
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<td>W</td>
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<td>558</td>
<td>Solving Quad. Eqns.</td>
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<td>F</td>
<td>11/22</td>
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<td>567</td>
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<td>13 – 21 odd</td>
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<td>7.3</td>
<td>574</td>
<td>Applications</td>
<td>9,11</td>
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<td>Day</td>
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<td>Text</td>
<td>Page</td>
<td>Topic</td>
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<tr>
<td>M</td>
<td>11/25</td>
<td>7.5</td>
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<td>Graphing Parabolas</td>
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<td>W</td>
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<td>7.5</td>
<td>600</td>
<td>Graphing Parabolas</td>
<td>1 – 39 odd</td>
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<tr>
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<td>M</td>
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<td>679</td>
<td>Exponential Functions</td>
<td>1 – 11 odd</td>
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<td>8.4</td>
<td>688</td>
<td>Logarithmic Functions</td>
<td>1 – 23 odd</td>
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<td>W</td>
<td>12/4</td>
<td>9.3</td>
<td>778</td>
<td>Dist. Formula, Circles</td>
<td>1 – 37 odd</td>
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<td>9.4</td>
<td>792</td>
<td>Ellipses, Hyperbolas</td>
<td>1 – 23 odd</td>
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<td>F</td>
<td>12/6</td>
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<td></td>
<td>Review</td>
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Final Exams: 12/16 - 12/20

Final Examination: ______day, ___ December 2013, ___:____ - ____:____