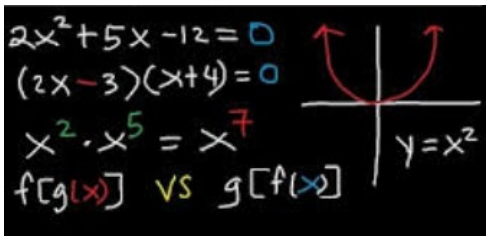
College Algebra

Summer 2019

MATH 3A

Section # 51168



Instructor: Dr. John Heathcote

Class Times: MTWTh 11:00 am-1:50 pm
Extra Date: **Friday, June 28**
Holidays: Thursday, July 4 and Monday, July 8

Classroom: FEM-3

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Welcome to College Algebra!

I would like to welcome you to MATH 3A. This class provides a review of algebra that you have seen in previous courses and extends the topic in such a way to prepare you for more advanced math courses such as calculus. Our goal will be to strengthen your algebra skills and look at these topics in more depth. By the end of this course, I hope that you feel confident in your skills and ready for calculus!

Canvas Course Site: All course materials (and links to recorded class lectures) will be available on the course management site on Canvas. You can access Canvas through the "My Portal" link on the Reedley College webpage.

Textbook: College Algebra, OpenStax

- Available at https://openstax.org/details/books/college-algebra
- A free pdf version of the book is available.
- An inexpensive physical textbook is also available.

Online Homework: A free online homework system is available through the Canvas course management site. Completion of these assignments is a required, graded portion of the course.

Calculators are allowed in this course. You will want a scientific calculator (The TI-30X IIS is a good one, available at the bookstore.) YOU MAY NOT USE GRAPHING CALCULATORS (SUCH AS TI-83 or TI-84) OR PHONES AS CALCULATORS.

Advisory: Eligibility for English 1A

Catalog Description: This is a college level course in algebra for majors in science, technology, engineering, and mathematics. Students will study polynomial, rational, radical, exponential, absolute value, and logarithmic functions; systems of equations; theory of polynomial equations; analytic geometry..

Grading:

50%	Tests
20%	Final Exam
10%	Homework
20%	In-Class Activities and Worksheets

Grading Scale:	90-100%	A
	80-89.9%	B
	70-79.9%	C
	60-69.9%	D
	<60%	F

Tests: Approximately four tests will be given throughout the term. These tests will usually cover one or two chapters from the textbook. The tests will be announced ahead of time. If you will not be able to attend class for a test, you need to make prior arrangements to take the test at another time. If you are sick on the day of a test, you must contact the instructor by phone or email **before the start class**. If you do not show up for a test without notifying the instructor, you will receive a zero for that test.

Final Exam: It is important to learn the material in this class and to retain that material. So, a comprehensive final exam will be given on our final day of class (Thursday, August 1st).

Homework: "Practice makes perfect" is particularly true in mathematics. Therefore, it is critical that you do your homework and put in a good effort in using that homework as a way to learn and practice the material. You will complete your online assignments on the Canvas site for this course.

Late Work: It is important that you stay up to date on the work in this class. So, you need to submit your homework on time. Late homework will not receive full credit.

Worksheets: Most days, there will be a worksheet assigned to follow up on the concepts that we are practicing in the course. These worksheets will be collected and graded. It is important that you work through these worksheets and ask for help as necessary. Unless otherwise noted, worksheets are due at the class following the class in which the worksheet was begun. If you miss one of these worksheets, download the worksheet from Canvas and print it out.

In-Class Activities: Students will participate in class! In order to receive other in-class activity points, students need to show work on the board, on the document projector, and/or explain their work to the class. This participation will be recorded and used for a portion of this grade.

Attendance and participation: It is important that you come to class every day and *participate actively*. Arrive on time. Late students not only miss important material but also distract the rest of the class.

Learning mathematics is not a passive activity. As we progress through topics, students will be given problems in class to practice new skills. During this time, all students are expected to have paper out and to be actively working on these math problems with the rest of the class.

If you miss more than four class sessions, you may be dropped. (However, if you decide to drop the course, it is **your** responsibility to make the drop official in the Administrations and Records Office or else possibly receive a grade of F.)

Accommodations for Students with Disabilities:
If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

Please turn off all electronic devices before the start of every class period.
The use of these devices for calls, texts, or other activities is prohibited without previous approval from the instructor.

Course Content:

Student Learning Outcomes:
Upon completion of this course, students will be able to:

- Analyze properties of various types of functions.
- Synthesize results from the graphs and/or equations of functions.
- Solve various types of equations and inequalities.
- Apply appropriate techniques to model real world applications.
- Use formulas to find sums of finite and infinite series.

Objectives:
In the process of completing this course, students will:
1. Analyze and investigate properties of functions, including linear, polynomial, absolute value, rational, radical, exponential, and logarithmic functions;
2. Synthesize results from the graphs and/or equations of functions, including linear, polynomial, rational, radical, exponential, and logarithmic functions;
3. Apply transformations to the graphs of functions;
4. Recognize the relationship between functions and their inverses graphically and algebraically;
5. Solve and apply rational, linear, polynomial, radical, absolute value, exponential, and logarithmic equations and solve linear, nonlinear, and absolute value inequalities;
6. Solve systems of equations and inequalities;
7. Apply techniques for finding zeros of polynomials and roots of equations;
8. Apply functions and other algebraic techniques to model real world applications;
9. Analyze conics algebraically and graphically; and
10. Use formulas to find sums of finite and infinite series.

Academic Dishonesty
Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences.

Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying one's work to another, giving or receiving copies of examinations without an instructor's permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

Plagiarism is a specific form of cheating: the use of another's words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references for all work that draws on the ideas, words, or work of others, failing to identify the contributors to work done in collaboration, submitting duplicate work to be evaluated in different courses without the knowledge and consent of the instructors involved, or failing to observe computer security systems and software copyrights. Incidents of cheating and plagiarism may result in any of a variety of sanctions and penalties, which may range from a failing grade on a particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents.