

Math 64: Intermediate Algebra
Section #1199
TTh 3:00pm-4:50pm, OC3508
Spring 2013

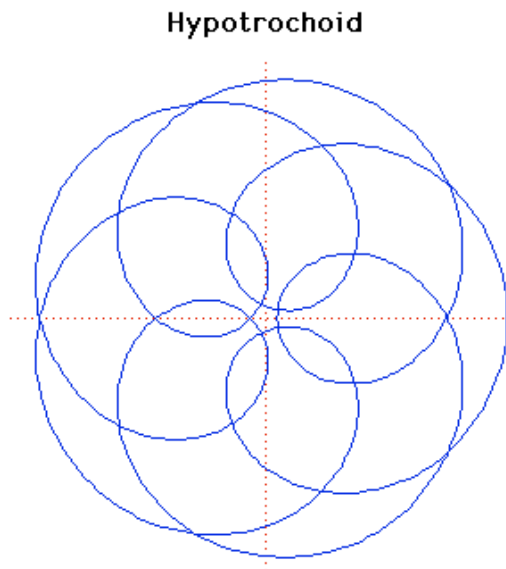
David Wesley Bonds
 Math Department, MiraCosta College
 One Barnard Drive
 Oceanside, CA 92056-3899

Office: T-315
 Office telephone: 760-757-2121, x6497 + voice mail
 E-mail: dbonds@miracosta.edu

Parametric Cartesian equation:

$$x = (a - b) \cos(t) + c \cos((a/b - 1)t),$$

$$y = (a - b) \sin(t) - c \sin((a/b - 1)t)$$



Prerequisite: The prerequisite for Math 64 is completion of Math 30, Math 830, or Math 830B with a grade of "C" or better, or a qualifying score on the Math Competency Exam (MCE).

Course Description: Topics include a study of radicals, exponents, rational expressions, concepts of relations and functions, exponential and logarithmic functions, linear and quadratic functions; and the solutions of equations from these topics.

Course Objectives: At the end of this course you should be able to (1) classify equations by type (linear, quadratics, rational, radical, exponential or logarithmic) and solve by applying the appropriate technique; (2) simplify expressions involving radicals, algebraic fractions, exponents, logarithms, and complex numbers; (3) graph linear and quadratic functions, identify intercepts and find the vertex of a parabola; (4) analyze verbal problems, model with appropriate functions, substitute the known values, solve the resulting equations, and interpret the result in the context of the problem; and (5) identify relations which are functions and determine the domain of a given relation or function.

Student Learning Outcomes: (1) Solve a variety of equations and determine the validity of solutions. (2) Students will be able to utilize function notation, determine the domain and range, perform the algebra of functions and compose functions. (3) Students will be able to analyze and graph linear and quadratic functions.

Textbook: Blitzer, *Introductory & Intermediate Algebra for College Students*, 4th ed., Prentice Hall, 2013

Calculators: Although calculators will **not** be allowed on some tests, the use of a scientific is required, and the use of a graphing calculator is strongly recommended. In general, the Math Department recommends the TI-83, or TI-83 Plus.

Course Evaluation and Grading: Your course grade will be based on the following:

Participation and Attendance	40 pts	A = 895 - 1000
Homework	130 pts	B = 790 - 894
Tests	600 pts	C = 700 - 789
Final Exam	230 pts	D = 550 - 699
		F = below 549

In addition to homework, there will be 4 tests, and a Final Exam. **THERE ARE NO DROPPED TEST/EXAM/HOMEWORK SCORES** in this course.

If for ANY reason, you must miss class on the day of a test, you **MUST** make arrangements with me **IN ADVANCE** for taking the test at some other time. It is your responsibility to make the necessary arrangements **beforehand**. Make-up tests *may not* be given for full credit.

*******The final exam date is Thursday, May 16th, starting at 3:30pm.*******

In this class we will be learning how to do problems algebraically in a step-by-step fashion. For all tests, points are assigned to steps and notation, as well as to the final answer. Getting the correct answer is only worth a small portion of the total points for the problem. To earn full credit for a problem, you must show all steps, use correct algebra and notation, and arrive at the correct answer.

Participation and Attendance: In order to get the most out of this course, plan to attend each class regularly, arrive on time, and stay for the entire period. Since attendance is mandatory, you will be dropped after the fourth absence. Re-enrollment (*which may occur once*) is possible, but you must discuss it with me first. Again, attendance is your responsibility as are its consequences.

It is your obligation, as well as your responsibility, to participate in class discussions and in-class assignments. I encourage everyone to be active learners; this means you ask questions in class whenever you do not understand something. In addition, I am available for individual assistance during my scheduled office hours, or by appointment. I advise you to get to know your classmates and to work in groups, if possible. PLEASE NOTE: 4% of the final grade is determined by class participation and attendance. I will take the following issues into consideration:

- Your ability to answer questions on assigned readings
- Your ability to focus on mathematics while in class, —saving personal conversations for outside the classroom
- Your ability to successfully work in small groups
- Your ability to offer insight to questions asked by fellow classmates
- Your ability to be on time to class
- Your ability to leave food or drinks outside the classroom
- Your ability to turn in assignments on time
- Your ability to refrain from talking to your neighbors when I am lecturing, —for some students the noise is distracting and disruptive
- Your ability to maintain a positive and supportive attitude, —being sensitive to the feelings of others, and avoiding criticism, teasing, or joking that might be hurtful

School Holidays: January 21st, February 15th–28th, and March 11th – 26th (Spring Break).

Course Engagement Binder: You will be asked to maintain a *three-ring Course Engagement Binder* with class notes and *Lecture Notes*. This binder may be submitted and checked for coursework progress on a **per chapter** basis. You will need to download and print the *Lecture Notes* for each chapter from the following web address:

<http://www.miracosta.edu/home/dbonds/Math64lectureresources13.html>

BEFORE YOU COME TO CLASS, you should read and attempt the problems in the *Lecture Notes* for each section. These materials are an outline of what we will be doing during class. The main purpose of this **Course Engagement Binder** is to keep you on pace for the course, promote communication, and to help us identify any topics where assistance/intervention might be needed.

Homework: Homework assignments will be given in class and will be checked/graded regularly. I expect assignments to be legible, neatly organized, and worked using 3 colors. (I will explain this in class). Some homework problems will be discussed during class, especially those that may have caused you particular difficulty. PLEASE NOTE: 13% of your final grade is based on your homework scores. Late homework will not be accepted.

Success in this Course: Mathematics is a "learn by doing" subject. A good rule is to set aside eight to twelve hours per week to do your homework assignments and to complete other study and learning tasks. These tasks include: completing homework, reading the text, doing examples from the text, making outlines or 3x5 cards, memorizing formulas, rules or processes, viewing videos or getting help from your instructor or from peers in the Math Learning Center (MLC), or the Tutoring & Academic Support Center (TASC). Do not allow yourself to fall behind in your work. Catching up before a test is an extremely difficult task.

In preparation for a given test, at a minimum, you should complete all homework and any review or supplementary handouts. I recommend that you review the sections and homework, and then complete the appropriate Chapter Review (these are posted on my website) with your book closed, showing steps and using algebra, and working under a two-hour time constraint. If you need to refer to the text when completing a problem, redo it until you can complete it correctly without reference. Then, redo it again at a later date to be sure that you remember it. In order to assure that you are properly prepared for a test, you should practice in an environment as close as possible to the testing environment: using no references, write out all problems and solve them showing all steps and using algebra, and work under a two-hour time constraint.

Office Hours: My office hours are meant for you. If your schedule conflicts with mine, see me in class to make an appointment. I will hold the following scheduled office hours:

Mondays & Wednesdays: 12:30-1:00pm,
Tuesdays & Thursdays 2:30-3:00pm

Facilitates Learning Sessions/Extra-Credit: Associated with this course is a Facilitated Learning Session (FLS) composed of students in this class. Your Facilitated Learning Session will be lead by a student who is outstanding in teaching ability and knowledge of this course. Prior to each test, if you participate in two Facilitated Learning Session meetings, you may receive a 4 percentage-point extra credit per test. Prior to each test, if you participate in one Facilitated Learning Session meeting, you may receive a 2 percentage-point extra credit per test. PLEASE NOTE: Extra-Credit points can only be applied to test grades of C (70.0%), or better.

Accommodation of Disability: Students with verified disabilities who need academic accommodations should discuss options with me during the first two weeks of class. Please contact me and/or the Disabled Students Program and Services (DSP&S) Office for further information.

Academic Integrity and Classroom Behavior: This class will be conducted in accordance with basic standards of academic honesty supported by MiraCosta College's *Academic Standards & Policies*, stated in the course catalog, pages 286-307. In addition to disruptive behavior, harassment, or willful disobedience, cheating, plagiarism, or other forms of academic dishonesty are not acceptable and will not be tolerated. Students are expected to conduct themselves in an ethical manner that promotes a safe and harmonious learning environment while on the campus. Charges of misconduct and disciplinary sanctions may be imposed upon those who violate these standards of conduct, or provisions of college regulations.

***** Mobile Phone and Personal Electronics Use Policy ***:**

- If you carry a mobile phone and/ or personal electronics, turn it/ them **OFF**, or set it/ them to “Vibrating Mode” while in class.
- Disrupting the learning environment with use of mobile phone and/ or personal electronics can lead to being dropped from the class.

Drops: If you decide to drop the course, use SURF to drop yourself. Don't wait for me to drop you automatically. Withdraw W's will be issued between January 26th and April 19th. If I drop you and you want to be reinstated, see me quickly.

**I look forward to getting to know each of you. Good luck,
enjoy the course, and have a great semester!**