Math 64: Intermediate Algebra Section # 2750 Online Spring 2021

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> 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, or Math 296-1, with a grade of "C" or better, or eligibility determined by the math placement process.

**Course Description**: This algebra course covers radicals, exponents, concepts of relations and functions, exponential and logarithmic functions, linear and quadratic functions, and the solutions of equations from these topics.

**Performance Objectives**: Upon successful completion of this course, students will be able to do the following: (1) Classify equations by type (linear, quadratic, radical, exponential or logarithmic) and solve by applying the appropriate technique; (2) Simplify expressions involving radicals, exponents, logarithms, and complex numbers; (3) Graph linear, quadratic, exponential, and logarithmic functions, identify intercepts and find the vertex of a parabola; (4) Analyze verbal problems, model with appropriate functions, substitute the known values, and solve the resulting equations; and (5) Identify relations which are functions and determine the domain of a given relation or function.

**Student Learning Outcomes**: For a given set of problems the student will demonstrate quantitative reasoning by developing a problem-solving strategy, performing appropriate analysis and computation, and critically assessing the meaning of the conclusion or outcome.

**Required Materials:** *MyMathLab* (Student Access Kit). This kit contains the *MyMathLab* software as well as an electronic version of our textbook. You may purchase the kit online at <a href="http://www.pearsonmylabandmastering.com">http://www.pearsonmylabandmastering.com</a> using a credit card, or purchase an access code from the College Bookstore and then log on using the access code. Detailed instructions about logging onto *MyMathLab* will be sent to you via email in Canvas. (You should be able to access *MyMathLab* via a button in the left menu in Canvas).

Our COURSE ID is **bonds10301** 

**Optional Hard Copy Textbook**: Blitzer, *Introductory & Intermediate Algebra for College Students*, 5<sup>\*</sup> ed., Prentice Hall, 2017

**Calculators:** The use of a scientific calculator is required (TI-30XIIS), and the use of a graphing calculator is strongly recommended for homework and quizzes (TI-83 series, or TI-84 series). On several occasions I will recommend the use of the online graphing resource called DESMOS. Although it is not required for our course, most students will find it to be very useful. It can be found at <a href="https://www.desmos.com/calculator">https://www.desmos.com/calculator</a>. You might want to create an account to save your graphs.

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

Zoom meetings	50 pts	
Homework	120 pts	A = 895 - 1000
Quizzes in MML	90 pts	${ m B}=790$ - $894$
Lecture Notes	40 pts	C = 700 - 789
Chapter Test/Projects	510 pts	D = 550 - 699
Final Project	190 pts	F = below 549

THERE ARE NO DROPPED SCORES in this course.

Our course will have three main tests and a final exam. However, I will refer to these tests as "projects," since you will have a <u>week</u> to complete them, and I will ask you to use our class *Lecture Notes* and our textbook as resources while you work on the questions in these assignments. That said, I will ask you to **not** use <u>inappropriate</u> <u>assistance</u>, or <u>automated computational resources</u> while you work to complete these "projects." I will explain the test-taking constraints and rules during our Zoom sessions and in Canvas announcements as we approach the opening date for each project.

The testing windows for the four Tests/Projects for our Math 64 section are listed below:

Project	<b>Opens in Canva</b> s	Project Upload Due Date
Test/Project for Chapters 8 & 9	Friday, 2/26/21	Friday, 3/5/21
Test/Project for Chapter 10	Friday, 4/2/21	Friday, 4/9/21
Test/Project for Chapter 11	Sunday, 4/25/21	Sunday, 5/2/21
Final Project for Chapters 12 & 13	Friday, 5/21/21	Friday, 5/28/21

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

**School Holidays**: February 12<sup>th</sup>– 15<sup>th</sup>, and March 22<sup>th</sup> – 27<sup>st</sup> (Spring Break).

**Zoom meetings**: In Canvas, at our course home page, I have posted links to recorded Zoom meetings from previous semesters, so you can access my instruction at your own pace. However, each week, I will hold at least two online Zoom class sessions, where we can discuss course topics and I can show you problem solving techniques. Each week, I will send out Canvas message/email announcements that will contain the relevant meeting times, URL links for our Zoom sessions, and PDF file attachments for the lessons I will go over (*Lecture Notes*). If your schedule does not allow you to participate in a Zoom class session, you can watch the recorded meeting at a later time. A link to a particular Zoom meeting recording will be posted in the original Canvas announcement and at a page linked to our course home page. 5% of your course grade is based on your participation in these meetings. Before each chapter test, please submit a Canvas message to me that documents your engagement in at least *three Zoom meetings prior to each exam*. Please note the date you watched,

or participated in the Zoom class session, and *briefly* describe the topic that was covered. Although I require participation in only three meetings for your course grade, I expect that you will watch, or participate in at least two Zoom meetings per week.

In the recorded Zoom meetings from previous semesters, I go over every example in our *Lecture Notes* and each problem in the test preparation documents *(Chapter Reviews are not required assignments this semester)*. Furthermore, in Canvas, I have set up Modules for each section we cover, and I have posted links to relevant videos other content creators have posted and that are hosted at YouTube.

**Lecture Notes**: During our Zoom class sessions, I will be going over lessons that I call *Lecture Notes*. I plan to present each definition and example problem in our *Lecture Notes* in detail. The lessons we cover in the *Lecture Notes* are an introduction to the topics you we will study in this class, while the homework problems in *MyMathLab* serve to provide more practice and exposure to a greater variety of problem types. As we consider problems in the *Lecture Notes* we will try to help you learn to write algebra in required formats, use appropriate notation, and promote communication. Hopefully, we will be able to identify any topics, or procedures where assistance/intervention might be needed. Furthermore, the definitions, activities, and problems that you encounter in the *Lecture Notes* will be directly related to test/project questions. I expect you to read and attempt the problems in the *Lecture Notes* for each section.

**4%** of your course grade will be based on your submission of completed *Lecture Notes* that you upload to the appropriate Canvas assignment location. Each time you submit your *Lecture Notes*, you will receive a score out of 100 points. This score will be based on your mathematical progress towards *completion* of the lessons and any mistakes you write will not lower your score on this type of assignment. Before you submit your completed *Lecture Notes*, please use **my version** of completed *Lecture Notes* to assist you with your efforts. Before you submit a test/project for grading, you should go over the corresponding *Sample Test*, or *Chapter Review* to help you reinforce your understanding of the algebraic problem solving techniques, procedures, and notation requirements that I will be expecting you to demonstrate on your test/project. Each *Sample Test*, or *Chapter Review* is posted at my Math 64 Lecture Resource page, as well as the corresponding solution documents for these test preparation materials.

Although I will attach *Lecture Note* files to the Canvas messages I send for our Zoom class sessions, you can download and print the *Lecture Notes* for each chapter from the following web address:

# http://home.miracosta.edu/dbonds/Math64lectureresources21.html

**Homework and Quizzes**: Homework assignments and quizzes will be submitted via *Pearson's MyLab & Mastering* using *MyMathLab* software. PLEASE NOTE: **12%** of your course grade is based on the homework you complete in *MyMathLab*, and **9%** of your course grade is based on the quizzes you take in *MyMathLab*. You can retake quizzes and you will have multiple submission opportunities for homework problems. Hopefully, this will allow you to improve your course grade. If you have trouble completing a homework assignment in *MML*, please let me know ASAP and I will try to post an extension, as long as you don't run past the corresponding test/project due date. If you have not been engaging in the course materials and you have not been attempting homework problems in *MyMathLab*, it is likely that I will **NOT** post an extension. I need to see your good faith effort.

**Success in this Course**: Mathematics is a "learn by doing" subject. A good rule is to set aside <mark>eight to twelve hours per week</mark> to do your homework assignments and to complete other study and learning tasks. These tasks include: participating in Zoom class sessions, or watching recorded lessons, completing homework in *MML*, reading the textbook sections, working examples from the

textbook, making outlines or 3x5 cards, memorizing formulas, rules or processes, or getting help from your instructor (me), or from tutors in the Math Learning Center (MLC) via the following website:

https://www.miracosta.edu/student-services/math-learning-center/index.html

Please do not allow yourself to fall behind in your work. Catching up just before a test/project due date is an extremely difficult task.

In preparation for a given test/project, at a minimum, you should complete all homework, *MML* quizzes, and the relevant *Lecture Notes*. I recommend that you review the appropriate *Sample Test*, or *Chapter Review* (these documents are posted on my website and I go over these materials in the recorded Zoom meetings). Please place an emphasis on your ability to show the required steps and your use of correct algebraic notation.

**Office Hours**: My office hours are meant for <u>you</u>. If your schedule conflicts with mine, please ask me to make a special appointment via Zoom. I will hold the following scheduled office hours:

Mondays & Wednesdays: 12:30-1:30pm, via Zoom

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 Standards of Student Conduct: This class will be conducted in accordance with widely accepted standards of academic honesty, as well as standards of student conduct supported by MiraCosta College's *Academic Standards & Policies* that are stated in the course catalog. 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* (in the virtual space this semester). Charges of misconduct and disciplinary sanctions may be imposed upon those who violate these standards of conduct, or provisions of college regulations.

**Drops:** <u>You must log into MyMathLab at least two times per week in order to remain in the</u> class. If more than seven days elapse without you completing work in MyMathLab, you may <u>be dropped from the class</u>. If you decide to drop the course, use SURF to drop yourself. <u>Don't wait</u> for me to drop you automatically. Since our class is a "late start" course, withdraw W's will be issued between February 18<sup>th</sup> and May 3<sup>rd</sup>. If I drop you and you want to be reinstated, communicate with me as soon as possible.

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

# How to Study Math in This Online Course:



Q: Are you up-to-date on the prerequisite material?

- A: The main prerequisite for Intermediate Algebra is Elementary Algebra, or an equivalent high school math course. If it has been more than one semester since you have had Elementary Algebra, or an equivalent course, you may find that you have forgotten some of the material. Please review the material in Chapter 5, 6, and 7, and if you feel unprepared for this course, please communicate with me, and we can discuss your preparation and possible options.
- Q: Are you prepared to learn in an online environment?
- A: Learning in an online environment can be challenging. Discipline and dedication are required. It is easy to get carried away by other life events and postpone your online assignments, or to feel "disconnected" from the class and lose your motivation. Please make it a priority to stay on pace in the course and to interact with me, or your peers when you feel the need to ask questions. Feel free to post questions in the "Discussions" area in Canvas. I will monitor this area weekly and I encourage you to do the same. Consider attending my online Zoom review sessions. (I will offer several throughout the semester that are announced via email in Canvas announcements.)

## Q: How often do I need to log on?

A: In order to succeed in this class, most students need to work daily. All assignment due dates are posted in the Assignment/Pacing Calendar for Math 64-#2750-Online on my main MiraCosta webpage, on our Canvas home page, and under the "Due Dates Calendar" in *Pearson's MyLab & Mastering*. Each assignment is due at 11:59pm. In order to learn the material properly, it is important to spread out the work during the week. I recommend that you complete the homework assignments throughout the week, and start the relevant online quiz as soon as possible, so that you will have time to redo the quiz multiple times if needed. If you are working regularly and making progress, I will usually allow homework extensions until the due date for the particular test/project. Your goal should be to make 100% on all homework assignments and all quizzes. *You must log into MyMathLab at least two times per week in order to remain in the class. If more than seven days elapse without you completing work in MyMathLab, you may be dropped from the class.* 

## Q: What should I do to prepare for exams?

A: Here are some suggestions for test preparation:

- You should complete every part of each lesson. In the textbook, thoroughly read the section, making note of definitions and examples. Read and complete the *Lecture Notes* for that section. You might choose to watch videos I have organized in Canvas (*recorded Zoom meetings and lessons in the Modules*) related to that section. Complete the homework assignment for that section, and redo any questions, if needed, to obtain a score of 100%.
- Watch the instructional videos and engage in the interactive lessons in *MyMathLab* that are embedded in the e-textbook.
- Make 100% on every quiz in *MyMathLab*. For each quiz, complete and redo it as many times as needed to obtain a 100% (You can only redo a quiz before a particular test/project due date). In between attempts, review or get assistance, if needed. (*Ask me for assistance.*)
- The successful completion of all homework assignments, quizzes, and review materials is necessary to properly prepare for a test/project.

# Q: What resources are available to me to help me succeed in this online class?

- A: Here are some of the resources available:
  - **Canvas**: At our Canvas site, I have organized materials and videos that are relevant to our course, and you can check your course grades. For each section that we study, I created links to YouTube-based videos that introduce, or address concepts, or examples from topics in our class (*these are in the MODULES*). I recommend that you make time to watch at least two different videos for each section that we cover. I think it can be helpful to engage with a similar presentation of the material, but one that is a little different than mine.
  - **Zoom meetings:** Please make it a priority to engage with our Zoom class sessions. If you cannot participate at the posted times, please use the recorded meetings to facilitate your learning.
  - *Pearson's MyLab & Mastering*: Use the *MyMathLab* software to access videos, example problems, step-by-step solutions, an electronic version of our textbook, homework problems, and quizzes.
  - Lecture Notes/Examples: *Lecture Notes* and examples will be posted at <u>my Math 64 Lecture</u> <u>Resource page</u>. These notes show that steps, notation, and techniques that you are expected to demonstrate on exams.
  - **Math Learning Center (MLC) Assistance**: Instructional aides and tutors in the MLC are available to help answer homework questions that you may have. You can make an appointment, or drop-in to connect with a tutor via the <u>MLC website</u>.
  - Email Communication: I also check and respond to emails on <u>Canvas</u> at least once a day during the week. When you run into difficulty, take a picture of your work with your phone send it to me as an attachment with your question in a Canvas message. I will try to check email on weekends, however, there might be times I cannot.

# Information about Homework Assignments, Quizzes, and Tests/Projects:

**Homework:** You should try to score 100% on all homework assignments. Use the "Question Help" button menu choices to connect you to assistance, or to guide you through the problem if you are having difficulty.

- Use the "Help Me Solve This" button engage in an interactive script that helps you work through a similar homework question.
- Use the "View an Example" button to read through an example that is a similar homework question.
- Use the "Textbook" button to open the e-textbook to the section that relates to homework question. You can read through relevant definitions and examples.
- Use the "Ask My Instructor" button to send me an email question via *Pearson's* site.
- Use the "Animation" button to watch an instruction video related to the homework question.
- Review **my** completed *Lecture Notes* to follow my examples that are similar to the homework questions.
- Post a question to class in the Discussions area in Canvas. Look to offer assistance to classmates who post questions in the Discussions area.
- Email me with a phone picture of your work, so I can see issues that are causing the difficulty.

**Quizzes:** Each chapter we cover in *MyMathLab* contains one quiz that covers several sections.

Q: Where do I find the quizzes?

A: Quizzes are online in *MyMathLab* and completed through *Pearson's MyLab & Mastering*.

Q: What are the due dates for the quizzes?

A: See the **"Course Calendar-Due Dates"** listed in the *Pearson's MyLab & Mastering* menu bar for due dates. All assignment due dates are posted in the **Assignment/Pacing Calendar for Math 64-#2750-Online** on my main webpage and on our Canvas homepage.

Q: What time on the due date is the quiz due?

A: Quizzes are due at 11:59pm on the due date.

Q: Are quizzes closed book?

A: You may use the textbook, *Lecture Notes*, and other references when you are taking quizzes. If you need to look at your notes to complete a problem, then be sure to redo that problem later without looking at your notes.

Q: How many times can I take a quiz?

A: Before the due date for a quiz, you may take and retake a quiz as many times as you would like. Each time you try the quiz again, you get a version with slightly different numbers, but the same types of problems. Your highest score out of all your attempts is the one that I will post for grade in Canvas. In between attempts, you can look at your results to see what you missed.

Q: How should I complete these online quizzes?

A: For each quiz, write-out each question, work the problem out completely, showing all steps, and then enter the correct answer in *Pearson's MyLab & Mastering*.

## **Tests/Projects**:

Q: Where are the tests/projects?

A: When a testing window opens, you will gain access to a link in our Assignments area in Canvas where you can download a particular test/project. A testing window will be open for a week, so you can your time to complete the questions. Before the testing window closes, you will need to upload your completed test/project as a PDF file in the appropriate location in the Assignments area in Canvas. Although you will not be allowed to use <u>inappropriate</u> <u>assistance</u>, or <u>automated computational resources</u>, you will be allowed to use the textbook, calculators, our completed *Lecture Notes*, solutions to *Sample Tests*, and solutions to *Chapter Reviews* to support your completion of the tests/projects.

Q: What if I fail to submit a test/project during the testing window?

A: Students who don't submit a test/project during the testing window will earn a zero on the test/project and may be dropped from the class for lack of participation. If you feel you might not submit a test/project assignment for any reason, please contact me as soon as possible.



## Student Registration Instructions for Canvas

### First, enter your Canvas course

- 1. Sign in to Canvas and enter your Canvas course.
- 2. Do one of the following:
  - » Select any Pearson link from any module.
  - » Select a MyLab and Mastering link in the Course Navigation. Next, select **Open MyLab and Mastering** or a content link.

#### Next, get access to your Pearson course content

- 1. Enter your Pearson account **username** and **password** to **Link Accounts.** You have an account if you have ever used a MyLab or Mastering product.
  - » If you don't have a Pearson account, select Create and follow the instructions.
- 2. Select an access option:
  - » Enter the access code that came with your textbook or that you purchased separately from the bookstore.
  - » If available for your course,
    - Buy access using a credit card or PayPal.
    - · Get temporary access.

If you're taking another semester of a course, you skip this step.

3. From the You're Done page, select Go to My Courses.

Note: We recommend you always enter your MyLab Math course through Canvas.

#### Get your computer ready

For the best experience, check the system requirements for your product at <a href="https://www.pearsonmylabandmastering.com/system-requirements/">https://www.pearsonmylabandmastering.com/system-requirements/</a>

#### Need help?

For help with MyLab Math for Canvas, go to https://help.pearsoncmg.com/integration/cg/canvas/student/en/content/get\_started.htm