

[a] 5 algebraic skills from algebra, geometry, pre-calculus and trigonometry

- 1) Trig Identities
- 2) Trig function and graphs
- 3) logarithm functions
- 4) exponential functions
- 5) basic conic functions

[b] 3 recommendations for what a student should do to increase their chances of success,

- 1) start studying from the first day, trust me even though you understand everything in class it will start vanishing soon if you do not study on daily basis. You will have to re-learn everything before the exams.
- 2) Do not just rely on class study. It's not enough to succeed in this class. Do the review packet well in advance and not before the exam. Time management and consistency is the key to get an "A".
- 3) Practice is the key. You don't have to be a genius. you can compensate your lack of smartness with practice and organization.

[c] 2 study or personal "mistakes" that you (or someone you know) made during this quarter

- 1) One thing I regret not doing is that studying on the day one. I relied on class work and procrastinated for which I paid price. This class requires regular studies. Studying one- two hours out of class every day can help ace the exams.
- 2) Organization is required to succeed in this class. Every time you practice a question follow steps. It will help you finish midterms on time. If you still forget something or are stuck on a question MOVE ON. I got stuck on a question and spent more time solving it. I was able to secure 20 points for that question but missed 30 easy points as I was out of time.

Personal Development Exercise

[A] 5 algebraic skills I did not master before this class

- Sketching graphs of basic algebraic functions
- Trigonometric identities
- Logarithmic functions and identities
- Inverse functions
- 2D vector solving

[B] 3 recommendations to increase success

1. Take notes in class and actually internalize and understand what is being taught instead of memorizing it.
 - If you actually take time to really think about how a solution to a problem comes to be instead of memorizing and implementing what you learned from your notes, solving problems will be faster and you will be able to understand the lesson even more.
2. Do all of the homework assigned and familiarize yourself with different problems shown in the book.
 - Your own self practice and study accounts for your learning of the chapters so getting the most out of practicing will help you become more familiar with problems and their variations.
3. Solve all of the midterm review questions and go over the ones you found difficult afterward.
 - The midterms review questions are helpful in getting an idea of the concepts you need to know for the midterm and if you don't know how to solve any of the problems, it is helpful to ask a friend and get mutual help from one another.

[C] 2 study or personal mistakes that have a negative impact on success

1. Not going to defend your work during office hours.
 - Defending your work is very important because you might realize that you made small errors in your solving process that lead you to getting the answer wrong, but recognizing and explaining your mistake is extremely helpful in getting partial credit. Missing out on defending your work can cause you to lose points for small mistakes that can add up in lowering your overall score.
2. Not checking answers after finishing midterms/quizzes.
 - Go over your work when you finish because making small algebraic mistakes can totally change your answer. Especially for questions that are connected to one another, one mistake on one problem can get the rest of your answers incorrect as well. Check over even whether you copied down the problem correct in solving it.

M. B. 109

PERSONAL DEVELOPMENT EXERCISE

(5) Math skills that should be mastered before:

- recognition of mother graphs
- working with natural logs
- simplifying fractions
- knowledge of the unit circle
- terminology of vectors

these skills are beneficial to mastering the next math class. From 42 to 43 I noticed a heavy use of radians and saw myself not needed to refer to old notes or waste time because I knew them already.

In order to be successful, make sure to become a master of your time. If you like playing games, set aside a specific time to do such. Same goes for any other hobby you think may be more important than your work. This will help you to do better in other classes. This will also help you in your future work assignments.

In order to be successful, if you work, let them know you are a student, and call off when necessary. It may appeal to some to make extra bucks, but if you aren't in desperate need of finances, school comes first. This will force you to do your work to completion. Also, this makes you responsible for your actions outside of school.

In order to be successful, maintain the relationships with peers in your math classes. You may be needing help from them in the near future and you will more than likely see each other again. They may need assistance from you but are afraid to ask. No one wishes to see their peers fail. It'll help you all to hold each other accountable for what is due/required.

One study mistake my friend made was only studying right before the test. He would get really anxious and end up not doing too well. This is harmful because you may end up having to take the class again and waste beneficial time.

One study mistake I made was not studying the entirety of my notes and hw. I thought I could guess what would be on the first few quizzes and learned shortly after that was not the case. We are our own greatest enemies and in an effort to counter that it is best to stay on top of what you are learning.

GODSPEED.

P.S.

Math 43

Bert Lo

3/25/19

Quarter Reflection

Skills needed:

- You must be very confident in your knowledge regarding trigonometric functions. This includes the unit circle and other trig formulas.
- Excellent algebra skills, considering nearly every problem involves at least a couple lines of algebra.
- You MUST know how to deal with exponents, how to manipulate them, how to multiply, add, subtract, divide...
- Knowing how to simplify answers, like taking the root out of the denominator, is a necessity because you will get points taken off if you don't.
- KNOW YOUR LOGS AND NATURAL LOGS. I personally like to think that I have good math skills, but where I lacked was in my knowledge of logarithms. The first midterm involved lots of logs in the exponents and for a week I was sort of behind because I had to re-learn them myself.

Recommendations:

- If you fall behind on the work load, it will be impossible to catch back up. Professor Lo is a very organized instructor with nearly all of his lectures laid out perfectly. If you decide to not do homework, you will soon find yourself falling behind and Mr. Lo will wait for you to catch back up.
- Staying ahead is a very big plus in this class. I used to finish the homework the day it was assigned, then I would go ahead and read (even though I didn't understand most of it) the next lesson for

tomorrow. This helped plant the concepts in my mind so when Mr. Lo went over them in class, it was a lot clearer.

- STUDY THE MIDTERM REVIEWS! Lots of the questions from the midterm review packet was identical to the ones on the midterm tests.

Personal mistakes:

- I found myself starting to overthink questions on the midterms. I felt really pressured by how much time given on the tests that I made simple errors, like misreading the question, that caused my grade to drop dramatically. Take your time on the tests and work diligently.
- Towards the end of the quarter like every quarter, it begins to get messy, especially in this class. I found myself getting off work around 10 and studying til 1 AM and only getting 6 hours of sleep. After a couple cycles of this, I began to notice my brain not functioning as well as it did in the beginning. Just make sure you get an appropriate amount of sleep before classes and try not to get bad anxiety like I did :)

Bonus note:

- I found that Bert Lo's quizzes and midterms gave me lots of test anxiety and stressed me out because of the time he gave on them. Seeing the way he divides up the points is very stressful, one question on a midterm was worth 76 points and I found myself focusing on that one question the entire test and ignoring the others, which only resulted in my grade dropping even harder. Just try to relax on the test because by the time you enter the room the test is already over, the knowledge you have isn't going to change and all you have to do is just apply it to the paper.

Algebraic skills I did not master before the class.

- Some of the trigonometric identities like the double angle and sum to product formulas.
- Reduction/simplification of complex fractions.
- Graphing quadratic functions and its inverse, identify domain, range, shape, shifting and reflections.
- Solving exponential and logarithmic equations.
- Conics formulas to find an equation.

Recommendations for future students.

- Do all the exams reviews, it will definitely improve your score on the exams since they are very similar on what you will find on the exams.
- Attend to the tutorial center at least three times a week, it will help you to have a better understanding on the lecture and clear any doubt you may have.
- Study with a partner prior a quiz or exam. If you like myself don't enjoy working/studying with a group at least work with a partner trust me it will improve your understanding of the subject.

Mistakes.

- Do not wait until a day before the quiz to find a partner, since it will affect not only the communication between the two during the quiz.
- Spend quality time to study and prepare before the exam. Do not wait until a night before to go over the material because it will not go well.

Personal development Exercise

[a] 5 math skills I did not master before the class

1. Being able to identify graphs via the equation
2. Trig functions played a big role in many of the early chapters
3. Quadratic equations were present in many chapters
4. Unit circle memorization, or at least knowing values in the first quadrant
5. Natural Log and identities of natural log

[b] 3 recommendations for students

1. Use midterm review packets posted as review for quizzes. Questions on midterm review packets tend to show up on quizzes. However make sure you at least understand how to solve all the questions and do as many practice problems as you can.
2. Always do some review after the lecture i.e; homework, and review textbook. Write the formulas you need at the top of your homework paper and for each question write it again before you plug in numbers to insure you remember it.
3. Start studying for a quiz or midterm at least 3-5 days before. Depending on how much material the midterm encompasses your review could take a while and it's best not to feel rushed. Do lots of review and identify where you make small mistakes so you can recognize them later

[c] 2 mistakes I made

1. I made many small mistakes that cost me points. I made small mistakes such as missing a negative sign that ended up costing me points that I should not have missed. I could have prevented this by identifying this mistake in review and checking it over.
2. I underestimated the challengingness of a couple chapters and they ended up being harder than I expected. When learning some chapters I expected that they would be easy to understand so I neglected doing some of the homework and it eventually came back to haunt me when taking the quiz and midterm. Doing the homework and reviewing early on in the start of the chapter would have been an easy way to shorten the review time later on before the quiz and midterms.

Personal Development Exercise

A) 5 Algebraic skills from algebra, geometry, precalculus and trigonometry that I did not master before taking this class and caused me to do worse are:

1. The correct form and use of trigonometric identities such as the Pythagorean and double angle identities.
2. The understanding of logarithmic functions.
3. Inverse trigonometric functions and its graphs.
4. The simplification of expressions
5. Dealing with fractional expressions such as the elimination of denominators.

B) Three recommendations for students who will take this class, so they increase their possibilities of success in this class:

1. I highly recommend that students get additional help from YouTube videos because it helps you to understand better the material and be ready to start doing your homework problems.
2. I also recommend that students work harder and practice twice the problems in which they struggle the most, because usually the hardest problems come in the quizzes and tests. That's going to help you understand the material better and feel confident for quizzes and tests.
3. Another recommendation is to read or at least watch a short video of the upcoming sections before going to each class so that you can have an idea of what the professor will be explaining in class and you won't feel lost in class.

C) Two study and personal mistakes that I made during this quarter:

1. Procrastinating at doing my homework was a big mistake I made in this class because for the first half of the quarter I couldn't keep up with the quizzes and it impacted my grade in my quizzes. Also, since I needed to catch up the sections really fast it caused me to not understand the material very well.
2. Not attending to office hours to get help from the professor in the questions and problems I was stuck with affected my grade because I wasn't able to answer some questions in quizzes and tests.

[a] 5 algebraic skills to know

1. Memorize the unit circle
2. Know basic trigonometric identities
3. Rules of log, ln, and e
4. Know the graphs based on their equation given
5. Simplify rational expressions

[b] What a student should do to increase their chances of success

1. Be confident in your work. You should be working on problems to a point where you feel confident in knowing what the next steps will need to be and how to execute them. Having this confidence will ensure that you do well on quizzes, exams etc. When I was stuck on a difficult topic, I worked through it until it made sense to me, not until I memorized it. I went through my notes, through the book, talked to people until I realized what I WASN'T confident in. Once I was able to grasp the idea, those questions that would appear on quizzes/ exams were easy to complete because I *knew* what steps needed to be done to complete it.
2. Talk with people in the class. It's hard to step out of your comfort zone when in a new class but even making one acquaintance will be beneficial. If your schedule allows it, meeting up with them before exams or quizzes will help you in achieving my first tip; being confident in your work. Talking through problems with people, even over text or writing out the work in a detailed way for someone else to see, will not only help the acquaintance but yourself as well in fully grasping the material.
3. Be present in class...physically and mentally. I'm typically a quiet person and speaking out is intimidating but even just whispering the answer to myself while a question is being asked is better than nothing. It's forcing you to be aware of what is happening and to not zone out, you're mentally present and actively trying to learn the new topics.
Similarly, not going to class will extremely decrease your chances of success. Unless you're a part of the small percentage of people who can learn well from the book alone, going to class will give you another perspective of the topics that might click in your brain more than if you were to just read the section.

[c] study or personal "mistakes"

1. Not actively doing your homework. You can do homework and just quickly go through the process of the problems and leave it at that, but if you do not put in work then you will not receive the results you want in return. My first mistake was not spending time with my homework. I did it, but didn't push myself to really learn it. Yes, it's frustrating at times, but once you sit down on a quiz or test and see problems you actively worked to learn during the homework, it'll be a breeze to complete. Of course, you may still make mistakes, but learning from those mistakes will make the topic stick even more. Once I changed my homework habits, the change in my grades was significantly noticeable.
2. Leaving work until the last minute. It's a big transition to go from being a procrastinator to someone who will stay on top of their work. This is something you have to tell yourself to do if you want to succeed in a class. Managing your time is key in college. You want to have a social life, work and juggle and full-time load of classes. Balancing all of that is hard but important and will require trial and error. It may be possible to get away with procrastination in some classes but leaving any work to finish till the last minute, especially in math and sciences, will not help you in any way. You'll become stressed, overwhelmed, and not give yourself enough time to know what you're doing and be confident in the material.

things I didn't master beforehand
trig identities
common graphs
unit circle
logarithms
remembering formulas in general

Recommendations

Going to class

While self learning is a possibility, that require a lot of discipline. In class we can ask questions, see examples step by step, and see problems the way the instructor wants it to be done.

Manage time on tests because it isn't add unlimited amount of time. If you're generally, a slow paced person, you may need to go quicker. Then check work after.

Working with others may be helpful. If there is a concept you do not understand, someone else may understand it better. Then you'll be able to learn from each other and do better overall.

Personal mistakes

When I "study," I stare at my notes in hopes that I would absorb the content. While this could help, I'm basically doing nothing and get distracted easily.

Having nearly a whole year since I did math is pretty bad. I basically had to relearn everything, but it's whatever.

Personal Development

1. Algebraic skills that I did not master in the past
 - a. Unit circle
 - b. Trigonometric identities
 - c. Inverse trigonometric functions
 - d. Logarithmic functions
 - e. Pythagorean theorem identities and double angle identities
2. Recommendations for students to increase chance of success
 - a. Do the homework, even if you think you mastered the section
 - b. Try not to miss class, and if you do, make sure you learn what you missed and practice extra because you will need it before the next lecture or you might be confused. It will make it harder to learn new concepts without learning the base concepts. What's missed will definitely show up later and it helps if you know what's coming.
 - c. Study before class as a warm up before lecture. Serves as a little recap from the last lecture, like a recap before the episode of a tv show.
3. 2 mistakes
 - a. I missed class on a Friday, before a three day weekend, and I thought the midterm was gonna be the next Wednesday. Turns out it was on Tuesday, the day we come back from the weekend, and I did not study the whole time because I was gonna study on the Tuesday. So, I only reviewed for an hour and did really bad on the midterm. Now I go to class everyday and write down the announcements each morning because sometimes there are changes.
 - b. I had a really good few weeks in the quarter where I studied a lot, worked really hard, and as a result I did well on the exam and quiz. After that I decided to slack off and relax a little bit. A little bit turned to a lot and time went by and I got really behind. I had to work a lot harder to catch up. It would've been easier to stay consistent and always try really hard and do the work that it takes to succeed.

5 SKILLS I DID NOT MASTER BEFORE THIS CLASS:

I want to make it clear first that I didn't take MATH41 and MATH42 since I was placed directly into MATH43 after the replacement test. So I'm not sure if all the skill below have already been taught in 41 and 42 or not.

- Unit circle
- Trigonometric identities
- General graphs of functions
- Transformation
- Graphs of Sine, Cosine and Tangent

3 RECOMMENDATIONS FOR STUDENTS TO INCREASE THEIR CHANCES OF SUCCESS:

- ***Always do the review packets asap:*** All of the review packets also include the review for the quiz, so if you can do all the questions in the packets, you'll have no problem with the quiz.
- ***Don't do every homework in the textbook:*** I'm not telling not to do the homework but doing it in an effective way. The amount of the homework may be too much if you choose to do all of it, and some of them aren't even included in the lecture. Of course, you still can do them all if you want to, that's good for you. But if you don't have enough time, choose your homework wisely, don't just jump in and do everything.
- ***Note down the lecture:*** If you note down the lecture, you'll find that all of them will appear again in quiz and tests. Use your note to choose the homework you need to do.

2 MISTAKES YOU NEED TO AVOID:

- ***Wrong calculation:*** Most of the quiz and tests don't allow you to use a calculator, which means you have to do everything by hand. The exams always contain a lot of calculation, and the time is very strict, so you hardly have time to check all of your answers again. Do it carefully and make sure it's right from the first time, don't just mess up and think you can check it later on.
- ***Not reading the instruction before doing the test:*** Sometimes the questions already have the information you need to calculate, but if you pass the instructions, you may find yourself waste a bunch of time just to realize the number you need has been provided above. Or if the instruction asks you to simplify all the final answer and you don't do that, you will lose lots of points for that.

Personal Development Exercise

5 algebraic skills that I didn't master that caused me to do worse:

- Knowing parent graphs and their functions
- Memorizing the unit circle
- Memorizing the trig identities
- Logarithmic
- Exponential

3 recommendations for fellow students:

- Finish reading as well as homework assignments on time as professor instructed. It's especially important to not fall behind in this course for coming tests and quizzes, you should have more than enough time to prepare for tests if you're following the schedule to do assignments.
- Always read the review packets and handouts posted on the website, the test/quiz questions tend to involve these materials.
- Do homework thoroughly to help with mastering the mathematical skills and getting familiar with different types of problems, you should be prepared for the tests once you have finished the assignments as instructed.

2 personal mistakes that hurt my grade:

- Procrastination. Last minute studying won't help you succeed in this class because you will definitely need more than one night to prepare for tests,
- Not finishing homework. Test problems will most likely be similar to the problems from homework, so not going over homework thoroughly beforehand made me do worse on the tests than I could have if I finished them.

Personal Development Exercise

1. Five algebraic skills I did not master before this class
 - a. Trig identities
 - b. Shapes of trigonometric functions
 - c. Trigonometric symmetry
 - d. Logarithms and base e
 - e. Unit circle
2. Recommendations
 - a. Do the review worksheets provided, in order to familiarize with the exam
 - b. Do all the homework, to receive more practice outside of class
 - c. Ask for help if needed, to receive help in getting better grades
3. Personal mistakes made
 - a. Being incredibly lazy when it comes to studying, leading to doing horribly on exams and quizzes
 - b. Not reviewing the material well everyday after lecture, leading to always cram before quizzes or exams

PERSONAL DEVELOPMENT

5 algebraic skills from algebra, geometry, precalculus, and trigonometry

Math 43 require some prerequisite skills which are helpful to understand and keep pace with the syllabus. Here are some the most necessities that I and my friends were lack of and had to get used to with during this course:

- Logarithmic and exponential functions
- Basic functions of parabola, hyperbola, ellipse
- Graphing and graphing transformations
- Transformations between powers and roots
- Basic trigonometric functions

3 recommendations for students who want to pass this class successfully

The very first and highly suggestion for Math 43 with professor Bert Lo is reading the material before class. This is not because he doesn't go to details of the lecture but because, in my opinion, you can understand deeply as well as remember the concept and formulas better than you enter the class without any preparation. In fact, professor Bert Lo addresses firmly to the main and important points of his lectures and pays high attention to the problems he would give in the quizzes. Thus, the next recommendation for his future students is keeping high concentration during class and do not hesitate to ask about what you do not understand yet. The last advice is doing at least two third of homework that he assigned for each chapter. If you practice more frequently, your speed of solving problem will be improved noticeably. This is so important for your quizzes because his quizzes usually thirty minutes long with about five problems, and mostly you don't have enough time to check your solutions again. By the way, talking about the quiz, try to go early in the day of quizzes, you will earn about more five minutes because he often carries the quiz earlier than usual class. With more five minutes, you can do a lot more than you believe.

2 study mistakes

He will deliver review package before every quiz and midterm, do not miss it and do it soon. I missed once and that quiz went bad because there was a kind of problem not in homework but in that review. Another mistake that I will never take again is that study too close to the quiz. A lot of functions and formulas will mess up your memory and I was hard to survive for quizzes of chapter 10.

Personal Development Exercise

[a] Five algebraic skills I didn't master before this class

- Exponential function,
- Logarithmic function,
- Trigonometric function,
- Inverse trigonometric function,
- Trigonometric equation

[b] 3 recommendations for what a student should do to increase their chance of success

- Don't miss any class. You will learn a lot in a lecture, and so it will be difficult to catch up on the new material if you are absent. In the class, the teacher gives an announcement, and it includes the specific date of a quiz. Therefore you should not miss the class.
- Reading the textbook before the lecture. It will help you to understand the material you will learn in the lecture. Also, it is important to review the material you learnt in the last lecture by reading the textbook because it helps to understand the lecture easily.
- Doing homework after the lecture. It will help to understand the material you learnt in the lecture. Also, it will give opportunity to know how much you really understand.

[c] 2 study or personal mistakes that I made during this quarter

- I did not try to get help from any resources. When I was struggled with the material, I could not get the good score on the quiz of the material. I should have used the sources of help.
- I did not review about the materials from previous math classes before this quarter. Since the quarter started, it is hard to make time to study about these, but still need to know these. Therefore, it was more difficult to understand the new material I learnt. I should have reviewed about these.

(A) 5 Algebraic skills from Algebra, Geometry, Precalculus, and Trigonometry that I haven't master before taking this class:

- Exponential Functions
- Logarithmic Functions
- Trigonometric Functions
- Trigonometric Identities
- Conics

(B) 3 recommendations students should do to help them succeed.

- Do the homework.
Though it's a very basic recommendation, it is still helpful in honing your mind to the subject. After all, it's hard to keep the lessons in memory if you let them rot in your mind at home.
- Attend the on-campus lectures.
Basically, you'll be able to learn more about the subject by doing so. In addition, you will also get the chance to ask the professor your question as they go over the subject.
- Cooperate with your classmates. Form study groups.
After all, "two heads are better than one." Of course, more would be great too. You might end up having questions that your classmates actually know the answer to. Through collaboration, you might also be able to learn faster in a group.

(C) 2 personal mistakes I've done that might've dropped my chance of success.

- Procrastination
Most of the time, I've always found myself doing all the homework the night before any quiz or midterm. I will say, this is not a choice I recommend taking. It will negatively affect your performance in those quizzes and midterms. Cramp all those information in one night of study, and a considerable portion of them will just spill out. Doing that will also cause you to be tired by the time the quiz/midterm comes, and you won't be in top condition to do them.
- The Textbook
Almost never in this quarter did I read from the textbook. I can see that that's affected my performance negatively, so reading it is indeed important. The suggested moment to read the textbook would be before the lecture actually takes place. If you've read the textbook then, you'll end up forming questions regarding the subject and you can ask those questions to the professor during the lecture. In addition, the textbook also contains lessons not gone over in the lectures.

[A] 5 Skills I wish I had mastered

1. double angle identities
2. sum & difference of angles identities
3. logarithmic functions
4. exponential functions
5. power functions

[B] 3 Recommendations

1. Do all the homework assigned and all the reviews sent out. The questions do appear on the tests and quizzes, and even if you do not master them, you can at least be familiar to write down something for partial points.
2. Go to the tutoring center whenever you can and get a private tutor if possible. This class requires a lot of studying and it's helpful to have someone to guide you through it because you can get overwhelmed very easily. A private tutor is so much more helpful than drop in tutoring because they get to know your strengths and weaknesses.
3. Defend your work on quizzes for maximum points, even if you think you won't receive any points. There have been countless problems that I should technically receive zero points on because I got the right answer, but when I went to defend my work I receive partial credit. Partial credit on quizzes can be worth a lot since each quiz is only worth 30 points.

[C] My 2 Mistakes

1. I didn't get help from the disability services before the quarter so that I would receive my accommodations during this class. I feel if I had gotten the help, I would have received an A in the class. The process of getting disability accommodations takes an entire quarter to complete and even with previously being diagnosed with my disability it took them 2 weeks to schedule an appointment with me to get approved. Get help as soon as possible.
2. I should have made sure my partners for my quizzes were on top of their studies, and shouldn't have depended on their knowledge for the partner quizzes. All three of my partners didn't study for their "assigned" portion of the quiz, and when it came down to it they ended up depending on my knowledge to finish the quiz. Make sure you're well rounded in the material, so if your partner lacks in one area you can save yourself from a potential bad grade.

Five Skills I did not Master before taking Math 43:

- ★ Factoring
- ★ Simplifying Expressions
- ★ Be able to sketch the basic trigonometric functions
- ★ Properties of exponents
- ★ Unit Circle

Three Recommendations for your Success in the class:

- ★ Always solve extra practice after the homework to make sure you understand the material even when it comes in different forms.
- ★ Go to office hours and seek help when needed, never wait until the end of the quarter.
- ★ Try to be friend with someone who is motivated to succeed in the class, so you can get motivated to work hard.

Two Personal Mistakes:

- ★ I took this class as Pass or No Pass, and that made me not work hard for this class, as I normally do in my other classes. I felt that passing was easy, however, I recognized in the middle of the quarter that I am on the edge of not passing the class, so I started working hard, but as I mentioned I started too late. I comprised all the work they covered in a short time, which made me not master the material like other students.
- ★ As a person who has 55% test anxiety, feeling confident about the material always helped. However, most of the time I became overconfident about the lessons and ended up receiving a low grade on the quizzes because of my overconfidence. So, always feel self-confident but not too confident.

5 algebraic skill that I should master before this class:

- Trigonometric values for some common angles: I think I would have done my quizzes better if I remember these values. There are some question in the prerequisites test that only ask something simple like a $\cos^{-1}(-1/2)$, which I can answer it easily if I studied the values' chart. Unfortunately, I didn't. Therefore, I get points from difficult questions but don't earn any points from an easy one. Moreover, because of this issue, I couldn't get a complete point for some questions. I mistake the values of sin and cos, which lead to a wrong solution despite the fact that I get everything right before that. So, I recommend learning by heart the trigonometric values of some common angles. It won't take you too much time
- Trigonometry identities: these formulas are really important. Indeed, they are hard to remember and easily be mistaken with each other. So, you should learn and identify them carefully or you will end up like me. Negative angle identities and Supplement angle identities really give me a headache since I cannot remember which value is negative and which value is positive.
- Graphing: graphing skill is also essential because the second and third quiz require it. I found these two quizzes most difficult in all quizzes I have taken in this classes. Trigonometry and graphs are my nightmare.
- Coordinate Geometric: you have to master how to draw a line or slope and understand how to do the problems of coordinate geometric in 2D. So, when you get into 3D, you don't need to restudy it again and focus on the new material only. I struggle a little bit when I have to do math problems in 3D.

- Multiplication table: It's embarrassing to say that I sometimes mistake some simple multiplication. The most typical are 3×8 and 4×8 . I know $3 \times 8 = 24$ and $4 \times 8 = 32$, but sometimes when I'm too focusing to do the test, I get them wrong.

3 recommendations:

- Do homework and review packet: I highly recommend you do homework and review them before the quizzes. Moreover, before very midterm or final, professor will give you a review packet. DO IT! The midterm will almost be the same. If you know how to do the mathematic problems in the review packet, you will definitely get a high score in your midterm.
- Meet with quizzes partner: if you have a partner quizzes, it would be best if you meet them once before the test. While doing homework together, you will have a deeper understand about the math problems. Also, you can get to know your partner and decide which one is better in which problem. For example, quiz 7 includes 9.4 and 9.5, you can quickly determine who do 9.4 and who do 9.5 problems base on you and your partner strength. By this way, you can get a higher score.
- Read the textbook: if you concentrate in class, you don't really need to learn when you get home. However, it doesn't mean that you don't need to read textbook. If you are an international student who find the professor speak really fast, you should read the textbook. Furthermore, if you miss some classes, you can use textbook to fill your knowledge. It's help, I guarantee.

2 mistake which hurt my chance of success:

- Like the professor said, if you get a good grade at the beginning of the quarter, don't be so happy with it and neglect your other quizzes. I did my quiz one really well, so on my following quizzes, I don't study much. As a result, my grade drop. I did really bad in my first midterm, only 57 over 150 . Therefore, I believe my chance to get an A in this class is really low. I really regret it.
- There are some math problems which I don't really understand when I study in class. I should have gone to the tutorial center to get help. If I have gone there, I wouldn't have to waste my time to figure the problems by myself . My grade would be higher if I visit the tutorial center before the test to ask some homework question, since the test is mostly base on them.

Math Development Exercise

*5 algebraic skills I did not master before the class

1. Using graphing calculator
2. Graphing on a coordinate plane
3. Recognizing patterns
4. Simplifying expressions
5. Recognizing shapes

*3 recommendations for what a student should do to increase their chances of success

1. Studying early- There are several quiz and exams during the quarter, so studying early can help you effectively. You may also have something emergency on your schedule that squeeze your time to study.
2. Do homework- If you think every time you can catch up the chapter, you will not be able to succeed in this class. You will do well on the test if you finish the homework each time.
3. Don't skip the lecture- I think the most important part is the lecture because the lecture probably will be relative to the test. As a result, you can't skip any classes except you have any emergency, and you can be able to succeed.

*2 study or mistakes I made in this quarter

1. Review too late- In this quarter, I sometimes reviewed my notes or lectures really late that caused me been hurried on studying. It seriously made my grade go down, and I had to catch up the lecture. Hence, I probably will study and review early in order to succeed in the future.
2. Didn't fully learn the mistake I made- This point is the vital mistake I made in this quarter. I didn't fully learn the mistake I made in the class, and I just skipped those mistakes. Therefore, I couldn't remember some mistakes and made the same mistake again. Don't skip any mistake and learn it completely then you can succeed in the class.

[a] 5 algebraic skills that I did not master before the class

- Understanding the unit circle completely
- Memorizing the trigonometric identities
- Understanding general shape and position of graphs
- Understanding rules of exponents
- Understanding rules of logarithms

[b] 3 recommendations for what a student should do to increase their chances of success,

and why each one is helpful

1. Make friends in the class and study together. Study groups can help you review the concepts by guiding another person through problem sets. It can also help you focus better since you are surrounded by people who are driven to get a good grade.
2. Read the textbook before lecture. By reading the sections in the textbook before the lecture, you have a general idea of what the lecture will be about and it will be easier for you to understand the examples quicker. The homework will also be a little bit easier to do since you have a better understanding of the concept.
3. Review every midterm review. The midterm reviews were all very helpful for the midterms. There were many similar questions on the midterm that were included in the midterm review. I suggest studying the reviews as soon as it is posted.

[c] 2 study or personal "mistakes" that you (or someone you know) made during this quarter

that really hurt your chances of succeeding,

and why specifically each one had a negative impact

1. Bad time management. I was unable to manage my time earlier in the quarter which caused me to do poorly on midterm 1. I suggest finishing the homework as soon as possible so you have time to review for quizzes and midterms.
2. Afraid to ask questions. Earlier in the quarter, I would struggle with homework but was too afraid to go to office hour or ask classmates. This resulted in poor performance on my quizzes and first midterm. I would suggest asking as many questions as you can to have the full understanding of the concept.

Personal Development Exercise

Five important prerequisites:

1. Logarithms: Being comfortable with log/ln rules and non-integer exponents in general would have saved me a lot of time when trying to figure out, for example, hyperbolics.
2. Familiarity with how the graphs of basic equations look: For example, knowing how the graphs of “root x ” and “the cube-root of x ” function without too much forethought would’ve saved a lot of time and would’ve given me a better idea of what I was looking for before even starting a problem that involved them.
3. Completing the square: Though not widely used, I did find myself having to completely relearn this and other basic factoring rules which would have saved me time and, at the very least, boosted my confidence when factoring various expressions this quarter.
4. Trig functions: Though this was only useful in the beginning of the quarter, I found that it became a lot easier to learn hyperbolics (and find useful connections between the two) when I had relearned the trig relationships.
5. Strong knowledge of the rectangular coordinate plane and conics: Just knowing the basic format about conics in the rectangular plane, like how many foci does a conic have, etc. would’ve made that section easier when doing in the polar coordinate plane.

Three recommendations

1. Actively take lecture notes: I found that I was adding a lot of footnotes/extra thoughts to my lecture notes along with copying down what was written down on the board. I also actively listened and organized notes in a way that I knew I would understand. (For example, I would rewrite or number the steps of a process next to the part of an example problem that showed it) to make it easier for me later.
2. Don’t do the homework blindly: I found that while doing homework, I could get through it fine, but when it came to more conceptual questions on quizzes, I was unsure of the answer. Doing the homework while also keeping your notes and the textbook handy to help you really understand what you’re doing can help you get the whole concept.
3. Go to the tutoring center: It’s where office hours are held, so you’ll go anyway. Regardless, it’s a good place to study and get help. And if you sit on the “Precalculus” tables you’ll probably find someone in your class/teacher’s classes that you can talk to. :)

Two mistakes

1. I assumed I didn’t have to do too much work early on: I didn’t realize that you have to start putting in extra effort from the get-go in this class (even though it was stressed in the greensheet). Doing the assigned work, midterm review packets (especially) and just being on top of your learning is super important in this class, and not doing so made it harder for me to not only understand later subjects, but to catch up on points later on in the quarter.
2. I started doing work with other people later in the quarter: This was also stressed in the greensheet, but finding people to exchange numbers with in-class was a little intimidating, so I didn’t. If I had started going to the tutoring center — where a lot of precalc students do work — earlier in the quarter, I probably could’ve gotten a lot more peer support. :)

Personal Development Exercise

5 algebraic skills from algebra, geometry, precalculus and trigonometry I should have mastered before class

1. I should have memorized the general shapes of the graphs of various equations like $y=e^x$ and $y=\ln x$.
2. I should have also memorized my trigonometry identities earlier along with the pythagorean trig identities and knowing how to rearrange it to solve for different values.
3. I also should have mastered the technique of rearranging difference equations. For example, $3x-9=-9+3x$. This skill would have been helpful to make solving equations a little easier.
4. I should have mastered graphing ellipses and hyperbolas from their equations to help with the Polar Conics chapter. At least recognizing the equation and knowing what the general shape of it would have been good to know.
5. I also should have learned when to add or multiply exponents. I had trouble remembering the rules of exponents to simplify equations.

3 recommendations for what students should do to increase their chances of success

1. Students should do their homework on time. Doing homework on time helps so that students don't get behind with the material and don't end up cramming for quizzes and tests. Also, when new topics are introduced in class, students will have a good foundation on the background material.
2. Students should also always do the midterm reviews because it really prepares them for the midterm. The questions are similar and it is a good way of testing oneself before taking the test. It also covers all of the topics you need to know for the exam.
3. Students should also always attend class on time. Going to class is very important to understand the material as a lot of material is covered during class, so missing a day would greatly impact you. It is hard to catch up if you miss a day because of all the information you would be missing because every minute of lecture is used.

2 Study/Personal Mistakes

1. I made the mistake of cramming a lot of units along with this class. This class is very heavy with material and as I was taking two other classes that were also very heavy with material, I did not have the time in the beginning of the quarter to study enough for the quizzes and midterms. With little time to study, I did not do too well on the quizzes and my grades dropped.
2. I also made the mistake of not going to the tutorial center sooner. The tutors in the stem center are very helpful and will really help you to understand the material. If I went sooner, I probably would have understood the material better in the beginning of the quarter and scored higher on my tests and quizzes.

A- 5 algebraic skills I did not master before the class.

- Trigonometric equations (Math 42)
- The graphs of Inverse sine / cosine special values
- simplifying Exponentials and logarithms.
- the graphs of logarithmic
- Graphs of exponential (domain, range, intercepts, asymptotes, long run behavior)

B) 3 recommendations for what a student should do to increase their chances of success, and why each one is helpful

B) 1-Defend your work, the teacher clearly states that you have that right, this really helps to identify your weaknesses so you would do better in midterm.and also you can get good amount of partial credits.

2- If you are struggling with a concept you should go to the office hours, The instructor is very helpful, he will help you answer to your question with no direct answer, he will teach you how to answer the question yourself, this will help you to get the answer from a trusted source, and you observe the concept in much deeper way which helps you to grasp the material.

3) follow the homework schedule,leave the test part for last day, by that time you should be able to solve all of them during a quick revision, This helps you to be prepared for the quizzes, and practice for the set of questions that will appear in midterms

C) 2 study or personal "mistakes" that you (or someone you know) made during this quarter.

I had a friend who participated in class, but didn't devote time for assignments, not devoting 10 hours per week, led him to not practice skills ,made him not prepared for quizzes, and not familiar with the questions of the quizzes.

I had a friend who fall asleep in class, Drink water, and concentrate because if you miss the lecture you basically have to work double the amount that you were supposed to work, and you will miss important information said by the instructor on how certain concept would appear in an exam.

5 algebraic skills that should be mastered

1. Understand how to manipulate trigonometric identities
2. Understand how to manipulate logarithms and exponents
3. Understand the distributive properties of multiplication and exponents
4. Know how to factor
5. Know how to get the (X,Y) coordinates from radians

3 recommendations

1. Do the homework as soon as possible after the lecture. Practicing what you just learned will cement the ideas in your head. Waiting until the last minute to study and practice will be a lot more difficult when you can't remember the lectures.
2. When you get back a quiz or test, look at the answers and try to understand what mistake you made. Knowing what mistake you made will make it less likely that you'll make it again.
3. Study with a partner or group. If you schedule a study group you're not likely to procrastinate with other people. If you're stuck on a problem there's another person that can help you, and if you can explain what you're doing to someone else then you have a good grasp of the material.

2 personal mistakes

1. I took messy notes. I wasn't able to read them and there were some gaps in the lecture that I needed for my homework.
2. On one of the sections I didn't do enough of the homework. I assumed that I had a good grasp of it from just one part and didn't do the rest.

Personal Development Exercise

[A]

1. Trigonometric identities.
2. Graphs of different functions.
3. Factorization.
4. Unit circle angles in radian.
5. Conic functions.

[B]

1. Read the textbook to make sure you know all the topics and examples covered in each chapter. You can borrow it from the library counter.
2. Spend 5-10 minutes to organize your notes right after class so you won't forget what you have written and won't have to do it all in one time.
3. Be on time for classes, especially on the test days, so that you can settle down and will not be so nervous about the tests

[C]

1. Thought that a quiz will be easy and did not do some of the homework and revision. As a result, was not familiar with certain types of questions and did not have enough time to finish it in the quiz.
2. Forgot to bring a calculator for certain tests. As a result, did not have enough time to finish or double-check some questions involving multiplications of larger numbers, powers and square roots.

Personal Development Exercise - Math 43

5 algebraic skills that I did not master before this class, causing me to do worse:

- Rationalization
- Simplifying radicals
- Converting between exponentials and logarithms
- Geometric equations and theorems
- Adding and subtracting rational functions

3 recommendations that will help you succeed more:

- Read the class rubric (expectations, course details, etc.) before even taking the class. It will help really map out what you need to learn to be successful in class and De Anza provides class details on their website. That was something I did not do, and because I took AP Math classes in high school I overestimated my abilities and I was not prepared for the class prerequisites at all because it has been more than a year since I have done any work on precalculus/calculus prior to this class.
- Communicate with your quiz partners and form study groups. Collaborating with classmates is very important if you yourself are not confident in your math skills, and that is something that you should consider in having because other perspectives often prove to be very useful.
- Go to the math tutorial center for help. There are so many people there that can help, either the professor, tutors, or even fellow classmates, and the times I went were very helpful. That is why I regret not opening up my schedule to be able to go nearly enough.

2 mistakes that I made which hindered my chances of succeeding in this class:

- At the beginning two of three weeks I heavily underestimated the difficulty of the class and did not make myself do the homework problems on time. By the end of midterm 1, I was around 2 weeks behind of the class work and that resulted in a lot of cramming a few days before a quiz, or even a big test. Because my prerequisites were shaky, cramming did not work a majority of the time and that really shows on my academic performance in the class. Nearing the end of the quarter I was relying on a lot of all-nighters to make ends meet, so really try to spread out your study schedule if you can, and avoid cramming like I did.
- Over-relying on partner quizzes to motivate me to study. This was definitely a personal problem but it might apply to you so I might as well talk about it. Essentially, having a partner during the quizzes helped me feel responsible for how well we do during the quizzes because someone else's grade relied on me, but I never had that sense of urgency when it was just solitary quizzes. It made me feel complacent and, compiled with being too lax in the first beginning weeks, really became a huge problem as the weeks go on. I was too invested in experience college for the first time and working that I let my academics fall behind, so I really urge you to find a healthy balance between life and school as early as possible in order to succeed in this class.

1. 5 algebraic skills from algebra, geometry, precalculus and trigonometry

that you (or someone you know in the class) did not master before this class

that caused you to do worse than you could have if you had mastery of them

- a. Hyperbolic function
- b. needs to know each value of common angles
- c. Rewrite Exponential and Log Equations
- d. Solve Polynomial Equations Absolute Value Equations/Inequalities
- e. understands each math words

2. 3 recommendations for what a student should do to increase their chances of success, and why each one is helpful

- a. Do the homework after the classes that you can find out what part you don't understand immediately, and you can go to ask at next class.
- b. Go to find a math tutor help you to understand that part you don't understand. Weekly tutor is better because that person will know which part your weakness is. And you can ask for extra practice question from tutor.
- c. Take a good rest before the quizzes, midterms and final. That will make you have a fresh mind to solve the problems.

3. study or personal "mistakes" that you (or someone you know) made during this quarter that really hurt your chances of succeeding, and why specifically each one had a negative impact\

- a. Need to review the notes and lectures before the midterms, don't only review from the homework and quizzes.
- b. You need also cover the part you don't do it during the partner quiz. Because that will make you lose points at that part.

Math43

Fall quarter 2018

Mon. Wed. 1:30-3:45

Personal Development Exercise

1. 5 algebraic skills
 - Inverse function
 - Exponential function (\log , \ln , e)
 - To sketch graphs with vertex and focus
 - Vector addition and subtraction
 - Some identities about \sin , \cos , \tan

2. 3 recommendation
 - Do the midterm review which is really important because it is helpful to learn the tendency of questions. Doing only review of quiz is not enough, for different types of questions were provided.
 - Do the handout; when professor post the handouts, they are so challenging to understand that we need to work on several times in addition to class lecture. Sometimes, I felt insufficient to do only the exercise on textbook without handout.
 - Visit office hour to defend own work on the quiz. Even though my answer looks error, there is still chance to get small point by professor's consideration.

3. 2 study or personal mistakes
 - As an international student, I had troubles in mathematical words. Without understanding the meaning of words, I made mistakes by doing wrong process and lost points.
 - I should have studied more about prerequisite contents that I learned in Math41 and 42 for the first quiz and whole curriculum. For example, I didn't master well about exponential function. Therefore, I had hard time in quiz and lecture.

Math 43 Personal Development Exercise:

- a) 5 algebraic skills from algebra, geometry, precalculus, and trigonometry that I did not master before this class that caused me to do worst than I could have if I had mastery of them.
1. Knowing how to graph sin, cos & tan.
 2. Understanding of laws of sines & cosines.
 3. Memorizing the trigonometric identities
 4. Knowing 4 basic rectangular- polar conversions
 5. Memorizing three values of the 6- Trigonometric Functions in the 1st Quadrant
- b) 3 recommendations for what a student should do to increase their chances of success, and why each one is helpful.
1. Don't be late for your class time.
Because there are many things that start when class begins, and if you come late like 30 or 40 minutes late you are going to miss a lot of information and it's hard to catch up sometimes. Specially during quiz or midterm day, you might not have enough time to finish up.
 2. Always do the homework.
Even though there is homework grade on this class, but you still need to do it. Because you actually will take some advantages from your homework so that you might do well on your quiz or midterm. Most of quiz or midterm questions are come from your HW.
 3. Check out the tutor center.
Tutor center is a really helpful place where you can get help and a good place to review or study your material. I used to go there before quiz or midterm and it always brought me a lot of advantages. Once I got a question, I can have the answer right away.
- c) 2 study or personal "mistake" I made during this quarter that really hurt my chance of succeeding and why specifically each one had a negative impact.
1. Procrastination.
I used to do the HW questions one day before my quiz day, and that really hurts me. There is really a long way to catch up, and you don't have enough time to review the material. You should always be prepared and do your HW on time.
 2. Master all the skills.
There are some partner quizzes in this class, and I used to separate the sections with my partner before the quiz. In fact, that will hurt you back in the midterm. Because you have to do your midterm independently which means you have to master all the skills eventually. Thus, if you are doing things like separate the questions with your partner it is a good strategy in partner quiz but you still need to review all the material before your midterm.

Personal Development Exercise

a.5 algebraic skills from algebra, geometry, precalculus and trigonometry that you (or someone you know in the class) did not master before this class that caused you to do worse than you could have if you had mastery of them

- Trigonometric identities
- Being familiar with the unit circle
- Factoring
- Simplifying
- Dealing with natural logarithms

b.3 recommendations for what a student should do to increase their chances of success, and why each one is helpful

- Try your best to check your work at the end of every test. There have been numerous times where I have been confident about a test but score low due to not being wary of careless mistakes. I recommend coming to class early on quiz days so you have extra time to do this.
- Read the textbook before lectures. Reading the textbook before lectures allows you to come into instruction days with a general idea of what is going on, allowing you to better understand the lesson. Coming into class blindly will allow you to be lost in lectures without gaining anything from it.
- Take notes in class. Professor Lo does examples in class and taking notes allows you to have some sort of reference when doing your homework. Sometimes the textbook does not go over complex examples and going back to the notes you take in class will help you succeed.

c.2 study or personal "mistakes" that you (or someone you know) made during this quarter that really hurt your chances of succeeding, and why specifically each one had a negative impact

- Not allowing myself enough time to absorb the information. I would give myself one to two days before a quiz to do homework. When the test day came, I would not remember the little details about the lesson that hurt me a lot.
- Being overconfident. There were quizzes where I thought I did well on and brushed the self grading off to the very last minute. This is when I realized that I made many mistakes and it was too late to go to the tutoring center to defend my work.

Personal Development Exercise Math 43

- A. 5 algebraic skills from algebra, geometry, precalculus and trigonometry that you (or someone you know in the class) did not master before this class that caused you to do worse than you could have if you had mastery of them:
1. Knowing trigonometry identities
 2. Knowing sin, cos and tan values of unit circle
 3. Know how to complete the square
 4. Knowing how to use the log properties
 5. Graphing exponential functions
- B. 3 recommendations for what a student should do to increase their chances of success, and why each one is helpful:
1. Establish a study group with at least three different people as soon as possible. It is better to have a study group with at least three people because you need them for three different quizzes. Create a group chat and communicate with your group members when you have problems while doing the homeworks and reviews, since it is likely that they can help you out.
 2. Do the checkpoints question after each examples in the textbook before doing any of the homework. It is to check your understanding on different types of the problems that you will encounter in the homework sections. You will less likely to get stuck on homework questions since you will be able to recognize the problems and the steps to solve it.
 3. Always go and defend your work right after when the quizzes are given back. It is so that you don't forget about it, which can cause you to lose a lot of points. It is also to help you better explain your work to the professor since the quiz is still fresh in your mind.
- C. 2 study or personal "mistakes" that you (or someone you know) made during this quarter that really hurt your chances of succeeding, and why specifically each one had a negative impact
1. Did not spend enough time reading the textbook. It's crucial to read the textbook especially for students whose first language is not English. There are many mathematical terms that you need to get familiar with in order to do the problems. There are problems that I could not do because I was not understanding the questions. When I don't understand a problem, I would not know how to start solving for it and ended up missing a whole chunk of points.
 2. Not well-rested before class. It is important to be well rested before class because it can help you concentrate better. Due to not having enough rest before class, I usually lose concentration half way through the class because of tiredness. This causes me to miss a lot of important information even though I came to class regularly, which further hurt my grades when the information that I missed show up on the quizzes. This also cost me more time when reviewing my notes because sometimes, I have difficulty understanding what I wrote down.

Personal Development Exercise

1. 5 algebraic skills
 - a. Graphs of different functions
 - b. Trig Identities (memorization of all formulas)
 - c. Polar Graphing
 - d. Expanding, factoring and simplifying
 - e. Logarithms

2. Recommendations
 - a. Arrive to test and quiz days early. He starts the test and quizzes around 10 minutes earlier than when the class starts. So you have more time to start on it. Especially for Midterm 1 because that one is the most important of them all, since it covers a lot of material.
 - b. Know how to choose your partner. Find friends who study and care about the class the first weeks of the class so that you can have them as partners later on. Do not wait for the class before to find someone random because you don't know if they know the material or not. You might end up the only one doing the quiz with no help at all.
 - c. Review the study guides. Most of the question on there will be on the test, even if you think that they are not because they are difficult. They will be on the test. Practice all the questions, homework and go to the tutoring center, they will help you.

3. Personal mistakes
 - a. The first few weeks, I only studied the problems from the lectures and that is not enough. I learned to read the book before the lectures and practicing different questions given by the book. With more practice it took me less time to solve a problem.
 - b. Due to other responsibilities such as work and other classes, I waited until the last minute to study for Midterm 1. I should have prioritized this class more the first few weeks of the class because it did affect my grade.

Personal development exercise:

[a] 5 mathematic skills I needed to work on to help me succeed:

- 1- Knowing and practicing trigonometric functions such as the double angle formula and the inverse trig functions, the unit circle, graphs. I tried to memorize them rather than practice them.
- 2- Knowing about conics: equations, what they are, how to find the foci, eccentricity etc.
- 3- Knowing how to find the domain and range of a graph
- 4- Simplifying natural logarithms
- 5- Graphing Hyperbolic Functions

[b] 3 recommendations to increase their chances of success:

- 1- When practicing for a quiz/midterm, write a variety of problems on different notecards (One question per notecard) from the multiple sections that are going to be on the midterm/quiz. Then, shuffle the notecards, choose one at random, and do the problem. This helped me because when taking the quiz, the order of the problems are random, and often when you practice a certain section the material from that specific section is still fresh in your head, so you may think you mastered the skill when you really have not. When using the notecard study tactic, it helped test my knowledge from all the sections by solving problems from each section when the type of question was not expected.
- 2- Go to the lectures, and stay till the end. In the lectures, the teacher goes over so much material, and I found that my notes from lectures helped me study so much. The teacher can show you specific tactics or ways to solve problems that are not in the textbook, or show you how he wants things done on the quiz that you won't get from the textbook. Lectures are informative and important.
- 3- Go to the tutoring center and office hours for help! I cannot stress how much this has helped me this quarter. The tutoring center consists of tutors who can help you understand the material you are studying, and going to office hours allows you to have one-on-one help with a question you may have with the teacher. Ask the teacher questions, and he will help really help you understand whatever it was you were having trouble with. I found this much more helpful than watching math videos and searching questions up on the internet.

[c] 2 personal "mistakes" that I made that had a negative impact:

- 1- Studying the night before. This tactic worked for me in high school but I realized the hard way that in this class and in college in general, one must study the notes as they are doing it in class and continue to practice and study at home multiple days and even a week before the quiz. Waiting last minute to jam everything in your head is not going to help you for the quizzes. To do well on a quiz, you really need to put in time and effort to understand the material before the day you're tested on it.

- 2-Not doing every homework problem. Doing every homework problem assigned is the best practice for a quiz. There were times where I got something wrong on a quiz, and it turned out to be a very similar question to one of the homework problems we were assigned. Doing every homework problem definitely prepares you for quizzes and helps you understand the material much more!

Math 43 - Personal Development Exercise

[a]

5 algebraic skills that I have mastered from this class.

- Remember the unit circle.
- Determine the sign of Sin and Cos in each quarter of the circle.
- Adding, subtracting and dotting two and three-dimensional vector.
- Finding equations of parabola and Circle
- Remember almost trigonometry identities.

[b]

3 recommendations for a student should do to increase their chances of success:

- Doing homework. Self-study is the best way to be mastered in Math. Learning something by ourselves will help us to remember it in our brain.
- Try to do all problems without a calculator. It will help to understand the fundamental will help us remember those problem better. Then each time we see the problem, we know what to do first.
- Read the textbook of the next lecture before class. This will help to understand better what the professor teach in class. Prepare before class prevents us from misunderstanding the professor.

[c]

- First mistake was from my partner on the quiz where he did not remember Cosine is an even trigonometric function. The negative impact is we lost almost of our point on that question.

- My second mistake was from myself when I tried to think a very simple question as a complicated question. I did not have enough time to finish that quiz.

Personal Development Exercise

[a] 5 skills needed to succeed in class:

- How to quickly graph logarithmic and exponential equations.
- Trigonometric identities.
- Natural logarithm properties.
- Parametric equations.
- Review formulas for 2D vector.

[b] My 3 recommendations to increase your chances of success:

- Take note in lecture.

You don't have to take note of everything but those formulas or examples from the professor should be in your notebooks. They will help you a lot when you do your homework. Besides, highlighting the parts that you should focus on will make it easier to find and review later.

- Do all the review packets and review the quizzes before midterms.

This will help you familiarize yourself with the problems appear on the midterms. It also prevents you from making the same mistakes in the quizzes.

- Try to do chapter review exercises at the end of the chapter in the book as much as possible.

Although not required by the professor but I found it's really helpful to do this. They cover the whole chapter's exercises and they're sometimes a bit harder so it's a good way to prepare for the midterms or finals.

[c] My personal mistakes

- I didn't check all my answers carefully so sometimes I left fractions not simplified. Because of that, although it's true, I lost a few partial credits. It also made the next questions much more complex since they use previous answers.
- I read the questions on the quizzes and midterms carelessly. I skipped some details so that I did more than I needed to finish the problems. Doing that also took me more times and confused me a bit.

Math 43 : Personal development exercise

[a] 5 algebraic skills I did not master before the class

- 1) Knowing and understanding hyperbolic functions ($\sinh x$, $\cosh x$, finding domain of $\sinh x$ or $\cosh x$ or $\tanh x$ etc)
- 2) Understanding parametric curves and sketch
- 3) Finding the polar equation of conic with focus at pole and directrix
- 4) Understanding graphing polar (Ex: "Limacon with loop", "Cardioid", "Limacon with dimple", "Convex Limacon")
- 5) Understanding mathematical induction (Basis step, inductive step, conclusion)

[b] 3 recommendations for what a student should do and why?

- 1) Go to professor's office hours

I always thought going to office hours would be difficult to get clear reviews and answers since there are a lot of students and lack of time. However, if you go to his office hours, it is really helpful to improve your math skills. He explains well and he encourages to get good grade since he gives you partial points if the question is reasonable.

- 2) Do homework and read the textbook regularly

I thought even though I do not read the textbook, the questions should be based on the lecture so I can handle it. That was the problem. If you study the textbook based on the homework schedule, your quizzes and midterms would be familiar since you already saw similar questions on the textbook.

- 3) No questions are stupid, just ask the professor

One of the biggest problems for my math skills was I did not ask for help that I am struggling with because I thought it was a stupid question to ask. So, it was hard for me to ask a question at first. But eventually your question may be the same question which others are having trouble also. When I asked for help, the professor really explained it to me very detailed. So, I felt really relieved. You need to know they are here to help you not judge you.

[c] 2 study or personal mistakes and why?

- 1) Did not study well for math partner quiz

If you want to succeed in partner quiz, I advise you to study with your partner as soon as possible and study by yourself also. Some student would think like the partner will do everything. Eventually, the similar concept of the questions will come out at the midterm or in the final. So be aware that you should also study for partner quiz and be cooperate with your partner to solve questions. It's for your own good.

- 2) Did not review at the beginning of the week of class

I did not review the math assignments and notes regularly at the beginning of the quarter. I thought I could handle the questions since I focus in class. However, that was a big mistake. You must have to review it and read the textbook and keep solving the questions over and over again. Interestingly, if you solved the question today, you forget the solution tomorrow. You should review not only based on the lectures, also the textbook and the handouts from the professor's website. It should be really helpful.

Math 43 Personal Development Exercise

- a. 5 Algebraic skills
 1. Careless algebra errors
 2. Graphs of exponential functions
 3. Memorizing trigonometric equations
 4. Inverse functions
 5. Symmetry tests

- b. Recommendations
 1. Form a study group
 - answer assignments together and compare in the end.
 - master all the concepts together its easier to do it with someone than being alone
 2. Manage your time wisely
 - don't take it carelessly, if you understand it take time to master it
 - do the assignments with a lot of time, instead of doing it before the day of the test/quiz
 3. Get a tutor
 - take advantage of the learning center it will helps you a lot
 - have someone clear everything for you if you don't understand it better than stressing yourself out.

- c. Mistakes
 1. Do not trust your stock knowledge. It is going to help you to study for this course but will not be guarantee you will pass it. Don't be so confident with your unmastered skills.
 2. Do your assignments. It will be helpful for quiz and test. It is for your own good as they say "Practice makes Perfect."

1) 5 algebraic skills from algebra, geometry, precalculus and trigonometry that you (or someone you know in the class) did not master before this class that caused you to do worse than you could have if you had mastery of them.

- Understand exponential and natural log
- Unit circle
- Trigonometry identities
- Graphs of functions
- Basic algebra

2) 3 recommendations for what a student should do to increase their chances of success, and why each one is helpful

- Read the greensheet. The greensheet gives you an expectation of the course as well as what you need to do to become successful in the class. It is also helpful because if you have a question about the course, the answer will most likely be in there.
- Arrive early. Lectures are very important and if you are constantly late it will be hard to catch up. The professor gives a slight head start to test are quizzes which are very valuable.
- Go to the tutoring center early. Most of the time tutoring centers are crowded during lunch and the afternoon. If you can go to the tutoring center early, tutors will be more available to help you with questions you have rather than be stuck on one question for hours.

3) Your 2 mistakes should not be the opposite of your 3 recommendations.

In other words, don't just say "I didn't do my homework" as a mistake, and "do your homework" as a recommendation.

- Not reviewing the previous class materials thoroughly enough. I find myself stuck in questions that require material that I am expected to know, therefore some of the materials in the class looks harder. Not understanding the materials from previous classes can also make it hard to understand the lecture as well.
- Not reviewing the notes in preparation for quizzes and tests. Sometimes studying from the book and doing the exercises on there is not enough as some examples come straight out of the notes. The notes are also helpful because it gives you different variation of the problems.

Personal Development Exercise

1. 5 algebraic skills from algebra, geometry, precalculus and trigonometry that I did not master before this class that caused me to do worse than I could have if I had mastery of them
 - a. Graph transformation
 - b. Conics
 - c. Graphing
 - d. Logarithms
 - e. Hyperbolic functions

2. 3 recommendations for what a student should do to increase their chances of success, and why each one is helpful
 - a. Do the homework to practice your learning
 - i. This is helpful because the homework questions helps your learning and prepare you for the quizzes and tests
 - b. Don't use shortcuts
 - i. During the quizzes and the tests there will be partial credits for the work you show.
 - c. Sanity check
 - i. Make sure you use sanity check to check if your answers are correct. Sometimes there will be points on the quizzes and test for sanity check.

3. 2 study or personal "mistakes" that I (or someone I know) made during this quarter that really hurt my chances of succeeding, and why specifically each one had a negative impact
 - a. One of my mistake throughout this quarter is not coming to office hour to defend my work for the quizzes. I believe I got the wrong answer means that I won't get any credit for the work that I showed. But it's actually not that case, you still can some points back if your logic is correct.
 - b. Another mistake that I did was that study on the day before the day of the quiz or the test. This procrastination had lead to many unsatisfied grades. Make sure study a lot earlier before a quiz or a test takes place

5 Algebraic Skills To Be Familiar With For This Class

Trigonometry/Precalculus :

- Trigonometric identities
- The Unit Circle (specifically when θ does not have a conventional measure [$\theta = -7\pi/4$ and its coordinates e.g.])
- Definitions and graphs of trigonometric functions and how they relate to each other

Algebra/Precalculus :

- The general graphs of certain equations (as seen or mentioned in the prerequisite material for this class)
- Recognizing how to go about simplifying a given “complex fraction” (Manipulation through “partial fraction expansion” e.g.)

3 Recommendations to Increase Your Chance of Success:

- Study/Examine the assigned material on a daily basis if possible -

If you are taking the class that meets only a few days per week (Monday+Wednesday e.g.), it becomes even more important to study or at least take a look at the material each day, so the information will stay comprehensible. You can space out the amount of work you wish to do in a way that you will be constantly reminded of the concepts covered from class.

- Apply additional effort towards studying the material when it is approaching the date of a test/quiz -

Although I did not do well in this class for other reasons, it has always been more helpful for me to study more vigorously rather than emphasizing rest when it is close to the date of an

assessment. Of course, this does not work for everyone as there are those who might get too stressed out if they were to do this. If the stress factor is personally negligible, this is a good way to get a fresh understanding/memory of what you need to know for the upcoming test.

- Find help as soon as possible if you know you would need it / Actively take initiative towards your success -

Although your instructor is obliged to help his students understand the material, your apparent learning style may or may not correlate with the teaching style of his class. If this is the case, then it would be beneficial to seek out other experts in the subject to tutor you in a way that better accommodates for your learning style. Your learning style may even entail working better with peers, so for your success, make sure you do so.

2 Study/Personal “Mistakes”

- Procrastination is detrimental as the workload should not be underestimated.

I procrastinated to an extreme extent when it came down to studying the material. I may have subconsciously believed it was possible for me to quickly comprehend the material when it was obvious that it was not the case. If you have the time available to study, make sure you use that time to do so.

- Overloading your overall time schedule to a point in which you personally cannot handle

I was a “full-time student” with a practically full-time job, and I believe that I was not able to be as successful in this class than if I were to have a greater balance between the two. I did not have many chances to accommodate for this class from my job. Avoid “biting off more than you can chew” and really consider how you plan out the quarter. Time is almost a requirement towards being successful in this and many other classes ; do not stress yourself out too much.*

5 algebraic skills I did not master before this class include:

- Factoring quickly
- Pythagorean identities
- Using the quadratic formula
- Using polar form of coordinates
- Recognizing patterns when simplifying equations that fit into identities

My 3 recommendations to increase your chances of success

- Schedule 1 on 1 tutoring through the tutorial center for free, or meet with a tutor regularly outside of school. Having someone that can explain things another way from how you learned it in class can greatly increase your understanding of what you are doing making quizzes and tests a lot less stressful. For me it also serves as a way to force myself to sit down and get work done during that time and outside because you have someone to keep you accountable when you don't.
- Create an outline of each section before you do the homework. The book covers a lot of material and there are some things that we don't have time to fully address in lecture that will show up on tests and quizzes, creating an outline helps you see what was covered in class again and the thing that weren't covered. It also helped me when doing my homework because I have an idea what to do when I see a new type of problem, when I don't know what to do is when I find myself getting distracted and wasting time.
- Make sure your schedule allows you to be at office hours at least once a week. Office hours in the tutorial center is a great time to ask for help or just simply ask if everything you did looks correct. Also office hours is the only time to "defend" your answers from quizzes and there are a lot of points to be had by doing this, it's a must.

The 2 big mistakes made during this quarter

- Thinking I remembered everything from the previous class and not studying it for the first few weeks of the quarter. This set me back not only in points lost in the first couple quizzes, but also mentally set me back as it was like a loss of confidence for the rest of the quarter. Being confident that you have done the studying and are well prepared for a test or quiz is super important.
- Having a class immediately before this class. Quizzes and test are usually available as soon as the door to class opens sometimes a full 10 minutes and with the tight time limits on quizzes it is very advantageous. Also being in a class before this made it harder to review right before the quizzes sometimes.

Personal Development Exercise

[a] 5 algebraic skills from algebra, geometry, precalculus and trigonometry that you (or someone you know in the class) did not master before this class that caused you to do worse than you could have if you had mastery of them

- Logarithms
- Knowing what the graph would look like just by looking at the equation
- Determining the Domain and Range by looking at a graph
- Forgetting to simplify my final answer
- Not knowing hyperbolic functions formulas

[b] 3 recommendations for what a student should do to increase their chances of success, and why each one is helpful

- Study for quizzes with your quiz partner.
I could not study with my partner because of time conflict. On the day of the quiz I could not understand the way he was solving problems. We lost a lot of time going back and forth on how he got to the answer.
- Don't procrastinate on correcting/defending your quizzes.
One of my classmates waited until the last day to correct his quiz and defend it. Because a lot of people did the same, he was not able to defend his work and lost the chance of getting more points for the quiz.
- Just because you can defend your work does not mean you should barely study for quizzes.
Quizzes will help you be ready for midterms. If you do well on a quiz you will most likely do well on the midterm. If do not do well on the quiz, you have a chance to learn from your mistakes before the midterm.

[c] 2 study or personal "mistakes" that you (or someone you know) made during this quarter that really hurt your chances of succeeding, and why specifically each one had a negative impact

- Wasting too much time on questions that are not worth a lot of points. I ended up not being able to finish the questions that were worth more points because I ran out of time.
- Not solving all the questions on the midterm package. I would later find out that the questions I did not know how to answer on the exam were the ones I did not do on the midterm package.

Personal Development

5 Algebraic Skills :

1. Double Angles Formula
2. The formula for different graphs and how they look like
3. Logarithms
4. Pythagorean Identities
5. The circle with its different radians and angles.

Recommendations :

1. Study where and when you can. Even if it is 10 minutes or less you might remember something you didn't before. If you don't study beforehand at all you will put yourself at a great disadvantage
2. Do the assignments early even if he has not yet gone over it. In doing so, you will understand the lectures better. If you are able to do the midterm reviews earlier you will find that some questions will be handy during the quizzes and not only during the midterms
3. While the lectures are comprehensive, be sure to take notes that cater to your studying process. Notes are a handy tool in the class and several quiz questions will reflect the notes in the class. It is important to be able to understand your notes so you have an easier time studying and remembering what you need to remember for the upcoming quizzes.

Mistakes :

1. A mistake in this class is time management. While you will have other classes while taking this class you need to be able to time manage your assignments. Do the harder assignments first when you can so you have time to do other things.

2. Another mistake in the class is procrastination. Do not procrastinate on assignments, while they have no point worth to them, they are helpful in studying. Procrastination and time management coexist with each other and you will need to be able to do both if you hope to get a decent grade.

[a] 5 algebraic skills from algebra, geometry, precalculus and trigonometry that you (or someone you know in the class) did not master before this class that caused you to do worse than you could have if you had mastery of them.

1. Knowing how to graph \sinh , \cosh & \tanh
2. Arithmetic Sequences and Partial Sums
3. Understanding of laws of sines & cosines
4. Knowing 4 basic rectangular- polar conversions
5. Standard Equation of a Parabola

[b] 3 recommendations for what a student should do to increase their chances of success, and why each one is helpful.

1. Don't come to class late

Because teachers often talk about the following work schedule at the beginning of the class, as well as some summary and review of the last class. If you stay late for a long time, you may not be able to keep up with the pace of the teacher, thus leading to a poor understanding of knowledge.

2. Do the homework

Because homework is the best way to review and check, doing homework carefully will make yourself more familiar with and understand the exercises. And if you don't know, you can find out ahead of time. And a lot of the exam questions are from homework.

3. Ask your teacher or classmates if you have any questions

Because the teacher has a better understanding of the knowledge, the explanation is more clear and intuitive. Of course, sometimes you can ask your classmates because they have more time and can communicate with each other frequently.

[c] 2 study or personal "mistakes" that you (or someone you know) made during this quarter that really hurt your chances of succeeding, and why specifically each one had a negative impact.

1. I often start to review and write my homework the day before the exam, which leads to the fact that I don't have much or clear knowledge of these knowledge. We need to do our homework as early as possible because we can know our problems and shortcomings earlier.
2. Sometimes I will leave the class early, which will affect my understanding and grasp of the knowledge of the latter half. And you may miss something because you don't understand the teacher's arrangement. I need to finish the class normally afterwards, which will make my understanding of the class more profound and clear.

a. **5 algebraic skills from algebra, geometry, precalculus and trigonometry that you (or someone you know in the class) did not master before this class that caused you to do worse than you could have if you had mastery of them**

- Trigonometric identities
- Unit circle angles and its values
- General shape of different functions
- Determining the end behavior for graphs
- Rule of simplifying expressions with log and exponents

b. **3 recommendations for what a student should do to increase their chances of success, and why each one is helpful**

- Work with people who complain less. A positive attitude is very important to succeed. When people around you always complain about how hard the class is, you will start thinking so and excuse yourself for not trying hard.
- Show up to office hours if you need help. I personally prefer communicating directly to the professor so that the way I solve the problems consist with what's taught in class. Also, ALWAYS DEFEND your work for quizzes, try it even you don't think you will get points back. You'll be surprised by what you actually get; or worst-case scenario, at least you have a better understanding of the material.
- Get enough practice before quizzes and tests. The quizzes and midterms are pretty alike the homework. But if you don't get enough practice you can't tell. Quizzes and tests seemed kind of difficult because they're strictly timed. In order to get it done, you have to have a clear idea of how to solve it in a snap of fingers. It won't happen if you didn't get enough practice. Don't set yourself behind.

c. **2 study or personal "mistakes" that you (or someone you know) made during this quarter that really hurt your chances of succeeding, and why specifically each one had a negative impact**

- Finishing the prerequisite review late. I strongly recommend getting the prerequisite packet done before the first lecture is given. Finish it as soon as possible. Aside from the prerequisites test, in order to understand midterm one materials, you are going to need these skills. Even midterm one seems pretty far away, it is the hardest out of the three.
- Inefficient time use at home. I have clear plans for what to do outside of class. But when I get home, the plans I make aren't followed through. After realizing this I kept myself at school as long as possible. But weekends are still quite tough.

Personal Development Exercise

A. List 5 algebraic skills that would of helped me in this class:

1. Working with Exponents. Knowing when to Add/Subtract or Multiplying/Divide with multiplying equations with exponents.
2. Having Trig identities memorized would help a lot.
3. Memorizing the Radian chart.
4. Knowing the difference between Theta or 2 Theta etc.
5. Knowing your Law of Sines and Law of Cosines

B. List 3 Recommendations to Increase your success:

1. Write down Formulas and Notes on each chapter on Flash Cards. Makes reviewing and going over important things before the test a lot quicker. Especially if you easily forget stuff.
2. Don't depend on your partner to do the hard stuff. Gotta learn the whole thing yourself. Midterm is not a partner test and neither is the Final Exam.
3. Fully understand the concept. Just doing the homework doesn't always help. Questions on the test is not always the same problem on the homework at the end of the chapter.

C. List 2 Study or Personal mistakes that I've made:

1. Over studying even when tired which burns you out quicker. Learn to take it in bits and pieces at a time. Take more breaks.
2. Not doing enough practice problems to have it really memorized. Doing more problems would help you recognize different examples of the same problem. It would help you solve the problem quicker as well.

[a] 5 algebraic skills that I did not master before this class that caused me to do worse than I could have if I had mastery of them

- Trigonometric identities
- That was the only problem I had during the initial time for this class. I had taken this class before, but failed, so I am now re-taking this course. I still had trouble with newer material like hyperbolics though. This is because my lack of study and dedication on memorizing the material taught.

[b] 3 recommendations for what a student should do to increase their chances of success, and why each one is helpful

- I would recommend going to class every day if you are physically able to.
 - This professor's lectures are entertaining and he is able to make the material easier to understand than on your own. He is willing to help anyone that is having trouble understanding the material, so showing up to all of his lectures is recommended.
- For the partner quizzes, work with your partner.
 - When I say work with your partner, I mean find time outside of class to practice problems together which allows both of you to know that you're on the same page as one another. And when it comes time for the quizzes, be sure that you both understand the material. Even if one partner is doing that section, the material will show up again on midterms or final, so be sure to know all the material taught in class.
- Daily reviews of the day's lecture.

- I would recommend to look through your notes on the lecture that day and see if you understood all of the materials taught. I would say a safe point to be at is if you are able to teach others the material in a clear and concise fashion. If so, then I would say you are pretty much prepared for future quizzes and or tests.

[c] 2 study or personal "mistakes" that I made during this quarter that really hurt your chances of succeeding and why specifically each one had a negative impact

- I got lazy and stopped doing the homework given to us by the professor.
 - Not doing the homework was a mistake because the professor specifically told us that some of the problems on the homework would challenge us in questions that were not covered in class, and will show up on tests/quizzes. Therefore, when it came time for those tests/quizzes, I was caught off guard and did not know how to fully complete the question, costing me a lot of points.
- Have better memory of formulas and/or equations.
 - There were some cases where he would write simple algebra or formulas that would show up on the tests/quizzes, and I would forget how it was written when I see those questions. If those formulas aren't sticking, keep practicing and hopefully it would get easier to remember.

Personal Development Exercise

5 algebraic skills I did not master before the class

1. Trig functions (cos, sin, tan, csc, sec, cot)
2. Factoring
3. Unit circle
4. Trigonometric identities (Pythagorean identities, co-function identities, double angle identities)
5. Graphing equations

3 recommendations

1. Go to office hours whenever possible or just study at the tutoring center. There are always people there to help you if you ever have any questions. The best part you get help for free.
2. Pay attention to the lectures.
3. Work on homework/ study with a partner or in a group. That way you'll have someone to help you when you get stuck and you can help them when they get stuck. When you have to teach the material it helps you reinforce your understanding of the material.

2 mistakes

1. I didn't do my homework until the last minute. Make sure you actually do the homework and don't wait until the last minute to cram in all the homework. There are a lot of problems but if you split them between a couple days it isn't that bad. What I found worked best for me was to finish the learn and practice problems right after the lectures and do the test problems few days before the quiz for some extra practice.
2. I didn't participate in class that much. After I started participating in the class I found that it helped me actually pay attention to the lecture. It also helped me better understand the material.

Personal Development Exercise

- A. 5 algebraic skills from algebra, geometry, precalculus and trigonometry that I did not master before this class:
- a. ① Trigonometry
 - i. It comes up a lot in this class and if you do not understand it at all then you should study it. Sine, cosine, and tangent concepts show up in hyperbolics. Things such as the unit circle and having radians were something that I did not master because I memorized the unit circle in degrees and did not have a good grasp of odd and even functions. I also did not have a good grasp of trigonometric functions. Also I did not know how to graph the inverse graphs of these functions which made me have to memorize hyperbolic graphs and trigonometric graphs.
 - b. ② Hyperbola ③ Ellipse ④ Circle ⑤ Parabola
 - i. I did not know how the equations of each of these looked like which caused me to have trouble during the polar coordinates and graphs material. I had to understand which formula looked like for polar comics and also had to know the orientation. If I had mastered it before, I would not have to study nearly as much material.
 - c. ⑥ Arithmetic and Geometric
 - i. I did not memorize the formulas from my earlier classes which caused me to struggle and have to memorize the formulas repeatedly.
- B. 3 recommendations for what a student should do to increase their chances of success, and why each one is helpful:
- a. ① Do the review sheet and the homework:
 - i. Although the homework is not required, there are a lot of material not taught in class.
 - ii. Review sheets are very helpful because there are some problems on the math quiz that are closely related to the problems on the review sheet.
 - b. ② Attend all the lectures:
 - i. All lectures are fast paced and you learn something new each day, so you have to attend them to not miss out on new material.
 - ii. This is helpful because you can also ask the professor for help on problems you do not understand and he can explain it to you.
 - c. ③ Work with partners and make friends in the class:
 - i. There are some partner quizzes and you want to make sure you have a good partner so that they do not slack.

- ii. Having friends in the class is helpful because they can be your study buddy, you can ask them for help on homework problems, and you can help them which helps you learn the material better.
- C. 2 study or personal "mistakes" that you (or someone you know) made during this quarter that really hurt your chances of succeeding, and why specifically each one had a negative impact:
- a. (1) Letting your partners do all the difficult work on the partner quizzes:
 - i. Letting someone else do all the work can be harmful for you because the same difficult problems show up on the exams and you will not understand how to do it.
 - ii. You will not understand the material for future classes and fail in the future if you do not understand the material that you are making your partner do. You will also feel that solo quizzes are a lot harder because you did all the easier problems.
 - b. (2) Not taking advantage of defending work for quizzes.
 - i. The quizzes are worth a lot of your grade and when you defend your work, you will realize what you did wrong and not make the same mistake for when you take midterms. You will avoid that mistake.
 - ii. You also get points back which help a lot and you will understand your mistake. You also get to talk to the professor during this time to help you understand other mistakes on the quiz.

Personal Development Exercise

[a] 5 algebraic skills from algebra, geometry, precalculus and trigonometry that you (or someone you know in the class) did not master before this class that caused you to do worse than you could have if you had mastery of them.

1. Sin and cos charts for all angles on the unit circle
2. Knowing the general equations and shapes of graphs so you can identify them more easily when doing a problem
3. Knowing the rules of exponents and logarithms
4. Memorizing formulas for the trigonometry and pythagorean identities
5. Hyperbolic functions and their graphs

[b] 3 recommendations for what a student should do to increase their chances of success, and why each one is helpful.

1. Make to take good notes. Taking good notes is beneficial because sometimes you can't look to the book to explain it the same way that the teacher does in class. The material done in class is all the material that is going to be on the tests so if you take good notes and study them the tests will not be as difficult.
2. Know variations of the same type of problem. Sometimes a problem can look easy when it is written a certain way but it can catch you completely off guard when it is shown in a different format or is solved using different approaches. Knowing the different variations and how to use different approaches will get you ready for any type of problem that may be on the test.
3. Make sure to do all the problems that are given to you. It is easy to put off homework when it isn't checked or technically "due" especially when you have other classes to worry about but it really is for your own good. Doing the problems in the book listed as well as the midterm review problems before every quiz or exam really helps prepare you for the types of problems that can show up.

[c] 2 study or personal "mistakes" that you (or someone you know) made during this quarter that really hurt your chances of succeeding, and why specifically each one had a negative impact.

1. Someone I know didn't really care to do any practice problems because they thought that sitting in class and taking notes thinking they understood it would be enough but when it came time for tests this person didn't do so well and would continue to make the same mistake. This person eventually ended up dropping the class.

2. It was difficult at first because I didn't know what to expect for the tests and I wasn't sure how to juggle my difficult classes. I would prioritize the class that I was doing better in to avoid the math problems that were difficult for me to solve when I should have been spending more time figuring them out and going to tutorial to get help. I would spend a lot of my time studying for chemistry because I thought it was a class that I was more likely to do better in when in reality I should have divided my time equally amongst my classes and studied for both and focusing on the math questions that I was avoiding.

Personal Development

To any future students that plan to or are currently enrolled into third quarter pre-calculus, this letter is for you to keep in mind as you make your way through the course. Third quarter pre-calculus is reliant on many concepts that you learned in previous classes which could be helpful if you remember to rely on those skills. This is also from my experience from struggling after not remembering these sections which caused me to struggle when it would've helped if mastered. I'll also provide recommendations for you to improve if you struggle through the class and say a few things that harmed my chances at succeeding.

5 skills I did not master before the class which could help you:

1. First and for most is Trigonometry which is a major reference point for a good portion of your studies in third quarter pre-calculus. Not knowing or having mastery over this like how I didn't, will become a weakness in studying future sections.
2. Expansion of equations which some other students I studied with had many problems with since their mind was so focused on simplifying equations. Sometimes taking a step of a problem and expanding it out will help you understand the next step.
3. Remember the intervals and the location of notches on the unit circle. The unit circle is used for the first half of the third quarter pre-calculus which is helpful in solving many future concepts that you learn.
4. The equations of a Parabola, Hyperbola, and ellipse are good to remember even if glanced over otherwise you could mistake other equations which will change your answer or confuse you.
5. How to find areas and volumes of different shapes is helpful as it could be used to find the area of certain regions using a method that will be learned later on.

3 Things to help increase your chance at succeeding in third quarter pre calculus:

1. Study in 20-minute intervals throughout the day. Studying all at once will cause burn out and humans can only focus on one thing on average for 20 minutes without burning out.
2. Create study groups. Find people which don't know certain things you know and help each other out by going back and forth by teaching. Teaching helps retain knowledge easier.
3. Handwrite what you can. Writing down your work helps with memorization and creates muscle memory for learning.

2 mistakes that I did which should be avoided:

1. Procrastinate. If you hold off on doing work, you accumulate more stress which will later make studying harder and keep you sharp.
2. Not do homework. Homework is important to memorize what you just learned. Do it later in the day to retain information more even if homework isn't required.

Five algebraic skills I did not master before the class

- Simplifying expressions involving exponents
- Sketching basic trigonometric functions
- Familiarity with the unit circle
- Factoring expressions
- Knowing the Distributive Properties

3 recommendations for success

- Read and try to understand the basis of lectures before class

This is helpful because once you sit through lecture, you will already have an idea of what will be explained and this will tremendously increase your chances of understanding the material with more ease. Hearing things a second time will also decrease the likelihood of forgetting the material.

- Go to the tutorial center for extra help

It is always helpful to make use of resources around you. Listening to different people explaining the same concept will familiarize your brain with alternate ways of resolving the problem.

- Study for quizzes and exams with the intention of doing well

Your intentions define your outcome. It is important to stay persistent because you are capable of accomplishing anything with the right mindset. This will help steer your focus away from any potential distractions and re-steer you toward your goals again.

2 personal mistakes

- I did not have a textbook for the first few weeks

I underestimated the importance of having the textbook for this class in the beginning of the quarter. This negatively affected not only my grades, but also my understanding of the material due to my lack of review. Working out practice problems outside of the classroom really is crucial for success in any math course and I was unable to do that without the textbook.

- I left my major studying in this class for the weekends in the beginning of the quarter

This is very harmful because the amount of material that is covered in the span of one week makes it difficult to review in the short span of your weekend. Also, I found myself forgetting most of the information we covered early in the week and frequently falling behind on the important new lectures. Review should be done daily!

Personal Development

[A] 5 Algebraic skills I did not master before class.

1. Trig Identities
2. Graphing
3. Rationals
4. Logs
5. Factoring

[B] 3 Recommendations for students

1. Go to the tutorial center. The tutors there help you out on homework and also help review for upcoming midterms and quizzes. They help you understand the material and also show shortcuts to some problems.
2. Work with other classmates. I found that not only do you learn from classmates, but you also reinforce your understanding when you help them out. You get the opportunity to share different techniques for learning and problem solving, plus it's a great way to make friends!
3. Don't cram. I've always felt the need to cram as much information into my head before a test, but that usually backfires. It gave me headaches and made me sleepy on the day of the test, which made me perform poorly. I found that it's better to learn anything through intervals. Spending at least 1 hour everyday of the week is better than spending 8 hours in a day for studying. It's less stressful and healthier.

[C] 2 personal mistakes I've made this quarter

1. For those who have work, try to prioritize one or the other. I understand if you want to balance both, but if you are supporting someone through your job, prioritize that job even if it means you have to take your time attending college. It's less stressful and more beneficial that way. If you're like me and work for school supplies, classes, and just to have extra side cash, then prioritize college.

Most employers should understand that college is more valuable than your part-time job and although you can't just ask for a day off just to complete an assignment, let them know ahead of time what you're going through. Personally, most managers I've had are reasonable and are willing to adjust for you. If you're struggling with class and can't make time for office hours, but really want to keep your job then take advantage of online communication. Let your professors know your situation. Almost all are very respectful and will help you with the class and sometimes provide personal advice.

2. Don't stress yourself out! I heard from a friend that their taking Calculus, Physics, C++, and EWRIT in the same quarter and boast about how difficult their life is. Why do that to yourself? I understand if you want to be done with community college asap, but it's more beneficial to stay and take your time than rush through it. If you take all these difficult classes together, it's going to be very time consuming and stressful having to alternate between subjects in a given day. You'll find yourself not being able to make time for studying since you'll be spending that time completing an assignment. Stacking all these hard classes and averaging a C is far worse than taking your time and averaging an A.

5 algebraic skills that I did not master before coming into Precalculus III: Advanced topics that could've helped me do better:

- I should've completely mastered trigonometric identities, and how they interact with each other
- I had almost forgotten that I was really bad at vectors during high school, and when I realized that a couple weeks in, the textbook really came in helpful before the concepts got reviewed in class.
- I did not understand the interactions of e and natural log before I got into the course, and that really impacted my grade hyperbolic functions
- Complete and utter mastery of mathematical induction was something I did not have before coming into this class. It's really important since it could change your final grade by about 5%
- Conics was one of my worst chapters back in high school, since I did not understand how the equations became a graph in the end. There are so many variables, and every single one is useful in some way. This should've impacted my grade, but I was able to understand most at the last second.

3 recommendations to increase chances of success:

- If you need help, the student success center is the best place to drop in and get tutored. I went specifically to the drop in center for precalculus, as there would always either be a tutor or a classmate. I went there a bunch, and my groupmates agreed that it was the best place to study given the consistency of 1-2 tutors in the vicinity.
- During the start of the quarter, it will be suggested of you to create a 4-person group. This is for partner quizzes and study sessions. I found groups also helpful since you're able to have 4 people answer 1 question separately, then discuss it as a group. If someone is confused, then other people can help. If everyone is confused, then Bert's office hours and tutors in the student and success center will be able to help.
- During his office hours, Bert is usually in the tutoring center. To get the quickest help, you should first know what questions you're going to ask, and then create a list on a whiteboard saying that you're waiting for him. This is a great opportunity for if you missed class to ask a couple questions, but don't ask too many at one time, since there will most likely be people waiting behind you, and his office hours don't last forever.

2 mistakes that I made that made a negative impact on my success through this course:

- The greensheet says you should for about 2 hours a day, given the amount of worksheets, study guides, and homework that is suggested to complete. I would highly advise to not do this all at once, but study for at least 30 minutes 4 times over 1 day. I did not put together any sort of schedule for each day through the whole quarter, since I didn't figure this out until the end of the quarter. Since I found this out, I advise using google calendar, as you most likely look at your phone a lot, so it'll just remind you of all the studying you have to do, so you don't have to organize it in your head.
- During the quarter, I was only absent for 2 days. During these days I did study, but it still severely impacted my grade. Once I got back, I thought I knew everything for a quiz, but it turned out that I in fact did not, given that I had not my friends any clarifying questions and I also did not look at the textbook. I began to study a lot for the second quiz, but I ended up not doing well on the second one either, since I had missed some concepts back on the first quiz. After seeing the correct answers, doing work in the textbook, and going to the tutor center as much as I could, until the midterm, which I was able to get the highest midterm grade I would receive that quarter.

Personal Development Exercise

5 Skills I did not master before this class that caused me to do worse.

1. Trigonometric functions and theories
2. Unit Circle
3. Exponent rules
4. Equations of different types of graphs
5. Everyday formulas ex. Distance formula, midpoint

3 Recommendations for what a student could do to increase their success

1. Know your prerequisite math material well beforehand
2. Must use textbook in order to succeed not just handouts
3. Truly understand the material and why things are the way they are instead of going through the motions

2 mistakes I made this quarter

Did not use textbook much until half way through. The textbook has very simple and basic instructions that is a good foundation to the material that is lectured in class. Coming to class prepared beforehand instead of going back to study would have helped the material be learned quicker and be retained more.

Should not wait the last couple days to start the review. For the first and second midterm, I started the review around a week before the actual midterm. If I started working on it even before that I would have been more prepared and knowledgeable for the test.

[A] Five skills from previous classes that I did not master that would have helped me:

Honestly, everything. Not only will Professor Lo test you on concepts learned in class but he really wants to ensure that you are Teflon when it comes to all math concepts learned up until this point.

[1] Not knowing my graphs (inverse of sin, cos, tan, as well as x^2 , etc.) well enough.

[2] Not having a high enough comfort level with logarithms and exponentials.

[3] Not remembering simple simple things when it came to variables, i.e. being able to factor 1^k and 1^{k+1} , or being able to simplify them like $(k+3)(k+2)!$ into $(k+3)!$, that really would've saved some time and frustration. SO EASY! UGH!

[4] Not having trig values seared in my brain ended up hurting me early on.

[5] Lastly, not memorizing all trig formulas/identities, i.e. all the formulas for $\cos 2\theta$, etc.

[B] Three recommendations for what a student should do to increase their chances to succeed and why each one is helpful:

[1] PSA: You can take this class Pass/No Pass to qualify for Math 1A, which I highly recommend if you're not a computer major and don't need to go beyond Math 1B. Professor Lo is constantly telling the class that these are concepts you'll see when you get into higher division math, engineering and computer programming classes. If you are majoring in one of those areas you should take as many of Professor Lo's classes as possible as he knows his stuff and will ensure that you know your stuff and succeed not only in this class but beyond. If you're not one of these majors, his class is especially daunting.

[2] Listen to Professor Lo when he says do all the homework and MORE if you want to succeed. Study the midterm review packet as soon as it comes out. Familiarize yourself with the packet's problems as it is very likely that some similar ones may even end up on the quizzes beforehand. Also, it will give you a decent feel for how questions will be worded on the test. For some unknown reason, I put more time into completing all the trio of unassigned homeworks from each section rather than focusing on the Midterm Review that Professor Lo passes out. WHY! Midterm Review questions were on the quizzes and tests. ONCE AGAIN, FOCUS ON STUDYING THE MIDTERM REVIEW IT IS REALLY HELPFUL!

[3] Make notecards of formulas we use in class. That way, if you're tired, burnt out, etc. and don't feel like diving into the overwhelming homework, you can at least get some quality studying done by going over your flashcards rather than having to pull out and set up all your stuff. It will also give you a good foundation. Also, add difficult problems that you fumbled on or got wrong from the homework or midterm review to your flashcards, the extra time will pay off.

[4] The course can get overwhelming pretty quick and unfortunately for some us, that just leads to dreading pulling our stuff out and procrastination. Do anything you can ahead of time to make diving back into this foreign language easier and less cumbersome, i.e. getting a stack of binder papers and writing out all the assigned problems of each section in the upper right hand corner of each paper for the quarter, ensuring you have enough binder tabs for each chapter, notes binder paper, etc. and as well as making tabs out of post-its in your textbook for each

chapters and the corresponding answers in the back. Do it at the beginning of the quarter when motivation is high, I know it sounds really stupid but being organized and prepared will be a relief later on.

[5] Obviously go to the tutoring center but also check out the ATC as well as their website. They offer free classes on how to tackle school subjects and habits. Their website is also really helpful because they specifically have a section dedicated to links that can you help do better in math, one I found useful was how to reframe my general attitude and anxieties surrounding math.

[6] Lastly, if you're not doing well in your personal life you're likely not going to do well in school. Don't lie to yourself, if you're not doing well don't put off taking care of yourself. De Anza has really helpful services for students from cheap medical care at the nurses office to private personal counseling sessions with a therapist. You already pay for these services in your tuition and fees, TAKE ADVANTAGE!

[C] Two study or personal mistakes you made during this quarter:

[1] I have always had problems facing my failures and in this class it really hurt me (as it does in every other aspect of my life). Professor Lo actually makes you do this by grading your own quizzes which is helpful. However, I was too ashamed and embarrassed to actually take the time to analyze my mistakes and see where I went wrong or what I wasn't understanding. I literally got the same problem wrong on a quiz as I did later on a midterm because I didn't want to hurt my pride anymore and didn't want to look at my quiz any longer.

[2] When I took Math 41 & 42 the concepts were all very new and foreign to me so I had difficulty picking them easily. This motivated me to study a lot more and I ended up doing really well. In comparison, Math 43 *seems* like such a breeze because it expands on easier concepts and is much more familiar than trig. That being said, I didn't perceive it as a bigger threat and didn't put in enough time to memorize formulas, fully understand concepts and correctly apply them on tests and quizzes.

Personal Development

A) 5 algebraic skills from algebra, geometry, precalculus and trigonometry that you (or someone you know in the class) did not master before this class that caused you to do worse than you could have if you had mastery of them.

1. Understanding the shape and behaviour, and graphs of equations
2. Properly using the unit circle, and having the values memorized
3. Understanding the trig identities, and when to properly use them
4. Factoring and simplifying equations
5. Using logarithms

B) 3 recommendations for what a student should do to increase their chances of success, and why each one is helpful

1. Do your homework with other students from class, or in the tutorial center.

I found that when I did my homework by myself I would always get bored, lose focus, start doing something else, and end up being unproductive. However if you do your homework with other, it helps you stay focused and on task. For example when I did my homework alone, and didn't understand something, I would start doing something else, but when done with other people I could ask them for help, and stay focused

2. Do not study last minute.

Do not study last minute, or you will become overwhelmed. I tried studying last minute at first and it did not work at all. Instead of that get all your homework, and practice problem done beforehand, and as the quiz approaches, do test problems. Proper spacing of studying takes off a lot of stress.

3. Come in for help.

If you do not understand something from lecture go to office hours, or the tutorial center. In highschool I would never go in for help after class, because I didn't want to look dumb, for not understanding something everyone else did. That doesn't matter in college, I realized soon that it was all the intelligent people that went in to get help.

C) 2 study or personal "mistakes" that you (or someone you know) made during this quarter that really hurt your chances of succeeding, and why specifically each one had a negative impact

1. I thought I knew concepts beforehand

Because this is a review class of pre calculus, I had already learned a lot of the subjects in high school, so I thought it would be fine to not study as much. This hit back hard as I did not retain the information as well as I thought, and this class was also at a higher level.

2. bad study methods

I Feel like my study methods were lacking in general, and that they could have been better. A lot of times when I studied for example 4 hours, I would actually only review 2 hours of content. A big part of this class for me was growing my study habits, and developing new ones.

Personal Development Exercise

5 skills I did not master:

- 1) Trigonometric identities
- 2) Know the parent graphs for all the basic equations
- 3) Simplifying fractions
- 4) Know how to use your calculator
- 5) Factorization

3 recommendations for student's success:

- 1) Memorize the unit circle: Right as math 43 begins, you will be tested on your ability to simplify, and when angles come into play unit circle becomes a core part of the problem in many cases.
- 2) Read what the question is asking carefully: Many times I've rushed through problems and jump to conclusions about what the problem is really demanding. Sometimes the problem requires more work, and sometimes it requires much less work. Without reading and understanding the question completely, you may end up solving the problem for a whole another unrelated question. Always read thoroughly.
- 3) Use parentheses: When doing calculations, the most annoying thing is when you mess up simple arithmetic. Parentheses can save you from this very easily. Use them appropriately and you can even plug it into your calculator with ease.

2 study or personal "mistakes":

- 1) Start studying early: I made the assumption that I could study as I go, but this class is not a joke. You really (really³) should start studying and keep up with the homework and reading from the get go. The class does not start slow; there is a lot of demand and you need to be ready.
- 2) Study with others: This class gives you the opportunity to work with others in quizzes. I completely undermined the idea of having a partner and working outside class with them, but eventually I listened to one of my partners and studied with them. There were holes in my basic understanding of math, ones I would not have really noticed unless someone sat there with me solving the same problem and discussing it. You partners can broaden your knowledge and test your understanding, which ultimately leads to a better grade.

Short guideline to succeed in Bert Lo's math43 class

The point of this guideline is to help you learn from the mistakes I have made this quarter.

PLEASE make sure to go through the green sheet thoroughly early on in the quarter. It gives in detail rules and points of how the class is going to be held & what is to be expected from you as his student.

You must also make sure that you have a decent amount of time to allocate to this class. This class requires you to work on 2 hours worth of homework a day. This excludes studying for quizzes that we have almost every other week, reading through textbook material before class & getting help at the tutor center.

Also the tutor center is a great resource for this class, Bert Lo will be there everyday to help his students. You can also make use of the student helpers there, though some might not be the most help the others are of great explanation.

The midterms are worth 450 points so please make sure to go through the midterm review thoroughly, the midterm follows the format & the questions are similar.

Things i wish i mastered

- Trig formulas
- Unit circle
- Math41 & Math42
- Algebra
- Hyperbolic functions

My mistakes

- Last minute studying
 - Goes back to what I said above, you must have time allocated throughout the quarter for this class. It requires a lot of time, and if you are taking other subjects with heavy amount of workload it is going to be a struggle. Due to my other courses I did not have enough time to put into this class.
- Not using the textbook enough
 - Going through the textbook material before Bert explains it in class gives you a large advantage in this class. This way you can ask about the things you are unclear about in class, while already revising what you've gone through in the textbook.