

Personal Development Exercise

- A. One recommendation to succeed in the Calculus sequence, especially in Math 1C, is to not procrastinate. Procrastination leads to studying and learning techniques the night before a quiz or exam, which causes you to not do very well. It is important to start a habit of reading and doing assigned homework the day they are assigned that way you have plenty of time to ask questions on materials that you are having difficulty with. By practicing the homework each day you gain knowledge and speed on how to solve problems, ideal to use in midterms when you only have fifty minutes to complete the exam.
- B. Another recommendation is to attend class and pay attention. With one class missed you are already behind in class. It is important to write down the notes, review, and even rewrite them after class so that you have a better understanding on how to do the homework.
- C. In addition, use the resources given by the instructor and the school. If you are having difficulty understanding materials and how to solve them, go to the instructor's office hours to ask those questions. That way you can have the instructor explain in further context the material. Going to the tutorial center also helps if you cannot make it to the instructor's office. If you do not ask questions you will not get help and will not succeed in the class.
- D. Math 1C is the accumulation of math 1A, math 1B, pre-calculus, and trigonometry. Knowing the skills from these previous courses will ensure your success in class. Trigonometry plays an important role in 1C. Knowing the trigonometric identities and equations, such as Pythagorean, will help you to manipulate equations in order to solve the equation faster and easier.
- E. Another skill from trigonometry is to know the unit circle. In other words, know what the cosine of π is and where it is in the unit circle. In math 1C you will need to identify where an angle is in a graph and what function yields that angle.
- F. Having a strong skill from algebra will help you in solving equations that involve polynomials or fractions with exponents. In many of my quizzes and even in midterms, I have made simple algebraic errors that lead to the wrong answers, which caused deduction in points.
- G. Above all, the important skill from precalculus is to be able to draw out the function of graphs. Graphs in 1C cover graphs in 2D and in 3D. Knowing how to graph a function will help you to translate it in three dimensional graphs. Also you will need to find the area or surface area of a graph and knowing the function's graph will help you to solve it.
- H. Also, knowing the characteristics of the graph of function, such as symmetric or intercepts, are very useful. Some problems involve finding an equation of the

asymptotes of a graph. Knowing if a graphic function is symmetric over the pole or x-axis will help you to calculate the area of the graph.

- I. Math 1A and 1B skills will also help you to succeed in math 1C. One skill is to know the limits of a function. Since in math 1C you will need to use theorems and tests to determine if a series is convergent or divergent. Which are based on the limit of a function.
- J. Another skill from math 1A is to know how to derive a function. Math 1C focuses on the behavior of graphs and functions and in order to understand those behaviors, you will need to take the first and even second derivative of a function. Also you will need to write an equation of a function based on its derivatives.
- K. A skill from math 1B is to know how to find the anti-derivative of a function in order to find the area, arc length, or surface area of the function. You will need to decide which technique of substitution or by parts to use.
- L. Another skill is to know improper integrals from previous math courses. You will need to find the limit of an integral function at the end points of interval stated, thus knowing how to find it will help you to solve for the problem and decide whether the integral function approaches a number or goes to infinity.
- M. One last skill needed to help you succeed in math 1C will be to know how to use L'Hospital's rule. To find a limit of a function you will need to use L'Hospital's rule, which uses derivatives to convert the function in to a determinant form, to simplify a function. Sometimes you will need to manipulate functions and convert them into an indeterminate form in order to use L'Hospital's rule to easily evaluate the limit.

a) Recommendation 1: Do the homework. The quizzes and midterms are based primarily on the homework and you can pretty much guarantee yourself at least a B if you are consistent with that.

Recommendation 2: Come to quizzes early. Why not get 40 minutes to take a quiz instead of 30 minutes? If you finish early, you'll feel less stressed. You can't go wrong.

Recommendation 3: Come to class on time. If you're in his morning section, just get used to waking up earlier than usual. You cannot be even one second late. I can recall on a number of occasions when I would stare at the second hand on the clock to see if I made it on time because it literally makes a difference between being late or on time for that day. It's not so much a big deal for the number of absences/tardies you're allowed before the 7th week (green sheet), but it's more that you're actually ready for class to start at 7:30 and not catching your breath.

b) Skill 1: Know your unit circle. Trigonometric functions show up very frequently in calculus. If you didn't like that part of precalculus, then you should either review it a lot or switch to a major that doesn't require calculus.

Skill 2: Know how to graph the basic functions like the difference/properties of $y = x$ squared, cubed, to the fourth, and to the fifth and the other things like conics, trig functions, etc.

Skill 3: Strong algebra. A lot of the stuff in calculus deals with half the alphabet in a line and still calling it math and not english. A lot of this comes from practice, so if you did not have practice with this in the past, then all you can really do is try to be extra careful while doing math (even though you should be doing that anyway).

Skill 4: Be comfortable with log/exponential functions. These functions mean a lot more in calculus starting from quarter 1.. You won't really understand until you take the class, but knowing the properties of logs and the exponential functions would be great.

Skill 5: You won't really need this until third quarter calculus, but being comfortable with vectors is a good idea. There are only a few things you can do with a given vector, but those methods can be used together to do a lot.

c) Skill 1: Know how to differentiate. This is pretty obvious, but I would go on to say that you should understand what differentiating really means and also understand how you can manipulate Leibniz's notation. If you truly understand the difference between dy/dx and dx/dy , both graphically and algebraically, then you'll be fine.

Skill 2: Learn good notation. I place this in skills you should learn from calculus because now is when wrong notation can lead to endless roads of wrong math. It's really tedious and sometimes it doesn't seem like it has a point, but it does. Just do it.

Skill 3: Limits come up surprisingly a lot near the end of second quarter and throughout third quarter calculus. It's not as trivial a subject though. Know how to evaluate a limit.

For the most part, the things you'll need to know for the class are outlined in the diagnostic quiz he gives out the first week of class. It sounds pretty discouraging, but if you don't get at least a 20ish, then your foundation for math until that point is very weak. Fix it at the beginning of the quarter and you should be fine.

3 recommendations:

1. Finish all the homework on time because catch is hard. If you are a section behind, it is hard for you to understand next sections. And the more exercises you do, more well you learn.
2. Always review what you learn every day and memory formulas. There will be no time for you to review everything that covered at the end of quarter if you do not always review.
3. Review what you learn in Math 1A and Math 1B because you will use a lot material from these classes, and if you are not familiar with these materials, you will have hard times. So, your benefit to review Math 1A and Math 1B during Spring Breaks and the beginning of the quarter.

5 skills from algebra, trigonometry, and precalculus:

1. $\sin^2(x) + \cos^2(x) = 1$ (use a lot)
2. $\sin^2(x) = (1 - \cos(2x))/2$ & $\cos^2(x) = (1 + \cos(2x))/2$
(Half angle formulas. Use them to find integrals.)
3. $a^{-n} = \frac{1}{a^n}$
4. $a^{1/n} = \sqrt[n]{a}$
5. $(x - y)(x + y) = x^2 - y^2$

5 skills from Math 1A and Math 1B:

1. $\lim_{n \rightarrow \infty} \left(1 + \frac{1}{n}\right)^n = e$
2. Know how to use l'Hôpital's rule. $\lim_{n \rightarrow \infty} \frac{x}{y}$, if the top and bottom are goes to 0 or infinite, the
$$\lim_{n \rightarrow \infty} \frac{x}{y} = \lim_{n \rightarrow \infty} \frac{x'}{y'}$$
3. Integrals convergent if the associated limit exists and is a finite number and integrals divergent if the associated limit not exist.
4. Formula for integration by parts $\int u \, du = uv - \int v \, du$
5. Using U-substitution to find integrals, Set u equal to some parts of integrals, and then find integrals of du.

Personal Development Exercise:

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

1. Take notes.

Take notes in class is very important because notes can help you review what professor have taught in class. Sometimes, the examples in book will not explain that clearly, and it may make you confuse the concepts, but if you take the notes, and write down the examples that professor gave in class, it will be much clearly.

2. Do homework and ask questions in class.

Homework can help you review the concepts and skills you have learned in class each day. It will help you more familiar with the questions because there might be some similar questions in quizzes or exams. After you finished your homework, you may have some questions that you do not know how to do. At this point, ask professor next day in class is a really good choice, because professor can explain the question you asked and analysis it.

3. Join Group tutoring and go to Professor's office hours.

Go to group tutoring and go to Professor's office hours are important to succeed in class. In group tutoring, the tutor will lead our classmates to do some extra questions, and he/she will also help you to explain the concept that you do not understand or unclear. Sometimes the tutor cannot explain to you the question, so you can go to the office hours and ask professor for help. Because Professor can explain much better than the tutor, and the explanations can help you more understanding the concepts.

[b] a list of 5 skills from algebra, trigonometry and precalculus that they need to be masterful in order to succeed in Math 1A-1B-1C

1. Remember the Law of Sine and Cosine.

2. Must know how to do fractions.

3. Remember the Trigonometry Fundamental Identities.

4. Be familiar with the addition and subtraction of (log) and (ln) and exponentials.

5. Be familiar with the formulas of ellipse, hyperbolic functions.

[c] a list of 5 skills from Math 1A-1B that they will need to retain to succeed in Math 1B-1C

1. Remember the Double- Angle Formulas and the Half- Angle Formulas.

2. Remember the Differentiation Formulas and Anti-differentiation Formulas in both 1A and 1B.

3. Know how to solve the area under the curve in 1B.

4. Need to know how to take the limits or find the limits by using the L'Hospital Rule in 1A.

5. Need to know what is convergent and divergent in 1B.

A-

- Do all the homework problems. Chose one or two questions for each type of problem, mix them up then practice them before the quiz/test. This technique can help you review the material and be familiar with various kinds of problems. It builds up your skills of recognizing and solving problem.
- Making correction for all your midterms, not just look at the solution key, but actually do them again. So you can remember your mistakes and understand why you get it wrong. This will decrease the chances of making the same mistake on final.
- Attending office hours and ask for extra help when you are not sure about the course materials. Your teacher will help you clear up your confusions or wrong assumptions you had before. Sometimes they will give you tricks/advice to recognize and solve particular problem.

B-

- Solving trig function
- Relationship between polar and Cartesian coordinates.
- Solving quadratic function
- Simply fraction, radical quickly
- Knowing the domains and ranges of the 6 basics trig functions

C-

- Taking derivative
- Implicit differentiating
- Finding anti derivative
- Finding limit of a function using different techniques
- Using different techniques to evaluate integrals.

A1) Get extra help with understanding the topic. During the lecture, information goes by fast and you don't retain everything. Just by obtaining more help, you can understand the topic better than before. Since most of math is cumulative, the information understood can apply to the next sections, which make it a bit more easier to understand the next topic.

A2) Make sure you can make it to class every day. Just by missing one day, you are "push back 2 steps" and get confused with how to do some problems. Even if the lectures go by fast, you get some grasp of how to do the problem, than not being in class.

A3) Do extra homework problems. Even if the homework says do numbers #, by doing just a little extra you feel more confident in being able to do the problems. Since there are no answers for the even problems, try looking online for extra practices. Practice makes perfect.

B1) The Double Angle Formula

B2) The Unit Circle, know the basic angles and values

B3) How functions looks like. Ex $\sin(x)$, e^x

B4) Factoring

B5) Identities of \sin , \cos , and \tan

C1) Know Your Derivatives!

C2) Know your anti-derivatives!

C3) Fundamental Theorem of Calculus

C4) How to take a limit

C5) Integrations by Parts

Chance for success

1. Be very diligent about your homework and practice doing each section multiple times. Doing your homework allows you to practice the skills you have learned in class and especially times close to an exam, you should go over each section and practice each problem. Have plenty of paper and sit down with the textbook and do problems for about an hour to two hours daily will make you feel very prepared for the tests.
2. Do not stress out about grades. Often times you get more anxious about your grades, try to meditate or relax every hour to allow your mind to reset after studying for a long period of time. This requires balancing the time of each class you are enrolled in and time management. Managing your time correctly will relieve your stress, even if you are not scoring a really high score, this will allow you to perform well.
3. Have a friend or a group to study with. It allows you to ask questions and maybe help another friend. This shows how well you know the material by being able to explain it verbally and repetition. Getting feedback from your peers or tutors will help you better understand the material. Reading the text does not hurt either.

Skills from previous classes

1. Remember your trig. identities because they shows up again and again. On the exams and quizzes, they may surprise you and be well adapted to converting one to another.
2. Proof-reading your work to make sure it makes sense. Go over the test and look for careless mistakes, often times you will find one.
3. Intuition about some material and just remembering how to perform the task.
4. Algebra is crucial in Calculus. The fundamentals of algebra is needed to do everything and most of the time you will be doing algebra instead of calculus.
5. Know how to differentiate, calculate area, volume, and understand theorems.

Skills from Math 1A-1B

1. Know how to differentiate and integrate.
2. Important to know all of the identities and properties of integration and differentiation.
3. Time management and repetition of homework from Math1A-1B will help you by knowing how much effort you need to put into studying.
4. Do not rely on a calculator, because it will not be used on most of the tests or quizzes.
5. Remember to practice the theorems learned in class and try different methods to broaden your view. Maybe you will find a shorter way or a more comfortable way to solve a problem.

Personal Development

Increase your Chance of Success!

1. First thing you should do is take advantage of the tutorial center. If you have a group tutor set up, go to every session. You may feel confident in the material, but someone may bring up a question that you yourself have not thought of, and cannot answer. Even "A" Students can benefit from group tutoring.
2. Take advantage of the extra time given for a test or quiz for showing up early. If you're like me, you likely feel pressured by time when taking an exam. By showing up early for quizzes you can get up to 1/3 amount of extra time (10 extra minutes + 30 minutes). This extra time will allow you to finish, and go over work you may have made mistakes on.
3. DO ALL OF THE HOMEWORK. This can't be stressed enough. You will not, WILL NOT, do well in this class if you don't do most, if not every, single problem. If you cannot do a problem, use the time in the beginning of class to go over it, or ask Mr.Lo about it during his office hours.

Skills needed from previous math classes

1. Remember your formulas for sin, cos, and tan. That means Pythagorean formulas and double angle formulas at least.
2. Know your unit circle by heart! It will save much precious time on quizzes and tests. Plus, you should have enough practice with it by MATH 1A to have it memorized.
3. Know simple algebraic techniques such as "Completing the Square". They will come into play more than you think they will.
4. Memorize the equations for the basic graphs such as Parabolas, Hyperbolas, Ellipses, ect., and how each graph is affected when the basic equation is modified (i.e. difference between $y = x^2$ and $y = -x^2$ or $(x/a)^2 - (y/b)^2 = 1$ and $(y/b)^2 - (x/a)^2 = 1$
5. MASTER YOUR ALGEBRA AND ARITHMETIC SKILLS!!!!!! Honestly the Calculus isn't the hard part, it's the darn addition and multiplication. You are probably used to using a calculator to do all your arithmetic for you up to this level. There will be very few quizzes and test where you can use your calculators, so make sure you know your arithmetic, and to always double check it. It only takes 1 arithmetic mistake to throw off your whole answer.

Skills needed from MATH 1A/1B for MATH 1B/1C

1. Differentiation is the most used technique to solve many different problems in Calculus. It's important to remember how to differentiate x^n , $\ln(x)$, a^x , trig functions, inverse trig functions, and how to use product rule, quotient rule, and chain rule. **Taught in 1A**
2. Integration is also very important for many problems down the road. Know how to effectively use the integration techniques: Substitution, By Parts, and Partial Fractions. **Taught in 1B**

3. Limits will be used throughout Calculus (and sometimes you don't even realize your using a limit). Remember how to take the limit of a function, and how to use L'Hospital's Rule. **Taught in 1A**
4. Understand the concepts of a derivative and an integral. Know what they would represent in a real world application. Its not enough to just know how to find the derivative or antiderivative. **Taught in 1A and 1B**
5. Memorize definitions (i.e. Definition of an Integral). If you know the definitions by heart, it will help your understanding of what it is, and also what its requirements are (if any). **Taught in 1A and 1B**

A.

1. Taking notes in class.

I think this is one thing you must do in the class because taking note can not only help you memorize the lecture, but also give you a place to put down the important notes which might not really discuss in the text book.

2. Homework

This quarter, homework gives me a lot of help. If you really want to do well in the exam, doing homework will give you a good practice.

3. Going to tutor center.

Tutor center is other source which helps me a lot. I always do my homework at the tutor center so I can ask the questions as soon as possible. The tutor over can help you every times.

4. Finding your weakness

You have to review your exam paper every time after the test. You can find out which part of lecture you still have problem and solve the problem as soon as possible. This can save your time.

5. Doing work with your classmates.

Find someone in your class and do homework with them. I think it is helpful because you can ask them question or they will ask you the question. You can review and study the lecture again when your classmates ask you questions.

B.

1. Knowing how to graph linear functions and quadratic function

2. Relationship between radian and degree.

3. Knowing how to put Pythagorean identities in the questions

4. Graphing inequalities functions

5 solving problems with trigonometric identities

6. Finding the point by giving radians.

7. Knowing what limits is

8. Knowing the basic of matrices

9. Knowing the basic of sequences and series

10. Doing the multiplication between two functions

C.

1. Solving integral problems

2. Finding anti- derivative of the functions

3. Understanding limits problems

4. Finding derivative of the functions

5. Knowing the relationship between graphs and derivatives

5. Finding the graphs concave up or down

6. Using different methods to solve integral problems

7. Knowing the basic of trigonometric integral

8. Finding area of the graph by using integral

Personal Development Exercise

(a)

For future students stating in Math 1A-1B-1C, it is not easy to take a class at 7:30 in the morning. There are many things that have to be covered in each quarter, so definitely do not procrastinate. I would say do not sleep late at night because concentrating in class is extremely important. If you pay attention really well in class, it helps you build up some good fundamental ideas when you are doing homework or reviewing the course material. It also saves you more time, so you can practice more problems.

I recommend students to do problems other than those that are assigned (mostly odd problem). Sometimes I find the even problems are more challenging than the odd problems. Doing more problems can not only train yourself the ability to solve all kinds of problem type, but it also increases your speed of solving problem. You will be able to identify what type of problem it is and just know which method to use.

All students should go to office hours often, especially the time before midterms and final. Although sometimes we can find some solutions online easily, but it's definitely different from getting teach how to solve the problem in person. Even if you don't have any questions to ask before testing, going to office hours is still helpful. Listening to other people's questions is also a good way of review.

(b) 5 skills from algebra, trigonometry, and pre-calculus

1. trig identities (ex. double angles identities and co-function identities)
2. sin/cos/tan of special angles
3. know how to graph (ex. power function, ln, log...)
4. polynomial long division
5. identify even and odd functions

(c)

1. L'Hospital's rule
2. Improper integral
3. Derivatives
4. Continuity
5. Linear approximation

A) 1. buy a solution manual

- it might save you when you cannot ask help from anyone else
- It will help you understand solutions and possible alternate solutions for the exam (professor lo assigns mostly odd numbered question and the solutions manual has solutions for odd numbers)
- even the group tutor was dependent on my student manual so it is important (sometimes he can explain the solutions for the later questions if he sees the manual)

2) arrive 20 min before class on exam/quiz day

- Professor lo allows you to take the quiz 10 min before the class starts so it will be a big help if you are slow
- 10 min so that you summarize your thoughts before class starts (so arrive 7:10 for a 7:30 class)

3) get enough sleep

- I know it is impossible for some people with full time jobs but try to get at least 6 hours sleep before the exam or you will make simple mistakes
- so cram two or 3 nights before but not the night before the exam do not procrastinate!!!!

4) Go to group tutor or go to tutorial center

- if you are shy to ask professor lo the group tutor is kind enough to backtrack 1a and 1b subjects
- you get extra credit
- ask them to repeat problems you did not understand during class they are very helpful (sometimes the tutor at the student center talks too fast (ask him to slow down)

5) don't leave a blank question/s

- place as much "correct" information on your test questions the points add up (even a correct denominator or limit has points)
- consult professor lo for wrong final answers ; you might pick up some points for your solutions as long as they are consistent (they stack up) and you might need the extra few points in the end
- there are no demerits for extra information as long as they are correct

6) if you don't have time.....

- at least study 1 type of problem for each section (in my experience there are no repeating method of solution for different questions on the exam) practice non-consecutive numbers (different solutions)
- study all the basic questions and leave out all the problems at the end (hard questions)
- if you missed doing the assignments from yesterday, do the assignment of that day 1st because it is still fresh in your mind

B) i) double angle identities (sin and cosine) / ii) Pythagorean identities (sin cos and tan) / iii) limits of tan, cos, sin / iv) Master radian equivalent of special angles (without converting to degree) (0 to 2π) v) the format of a parabola circle ellipse hyperbola equation vi) simplifying the addition of fractions vii) graph of a trigonometric function (to find limit) viii) (expansion of factorials to eliminate common factors in numerator and denominator) ix) special values of logarithmic function e^0 $\log 0$ $\log 1$ $\ln 1$ $\ln 0$ (to find limit) x) finding the point slope form, y intercept, slope int

C) i) the derivative of a trigonometric function with angle multiplied by constant ii) the derivative of a trigonometric function raised to a constant greater than 1 with angle multiplied by a constant greater than 1 iii) derivative of a logarithmic function raised to a fraction iv) the derivative of a logarithmic fraction raised to a constant greater than 1 v) finding the limits of an integral to find an area vi) partial integration "or" substitution method vii) integral of trigonometric functions with angle multiplied by constant viii) integral of logarithmic function with exponent multiplied by constant ix) elimination of parametric equation to produce 1 equation and vice versa x) L'hospital's rule or finding the limit at infinity by division of highest powered variable x) kramer's rule or finding the determinant using co factor method

Personal Development Exercise:

It is difficult to get up for a 7:30 morning class every day. However, once your body gets used to it, you would wake up before your alarm rings. Thus, it is very important for you to change your daily routine at the beginning of the quarter. It is understandable that we have a lot of things to do every day, but we have to manage our time well so that we could have eight hours sleep by the next morning. Sleeping is essential for doing well in any courses. Also, it takes about 30 days to change a habit. Once we register for classes, we need to start preparing for them. I started changing my routine and went to sleep around 10 every night at the beginning of the quarter. The result of it is I always wake up before my alarm rings. Forming a habit like this gives me enough to prepare myself for school and helps me maintain focus during class time. I have not been late for class for the whole quarter. Therefore, it is very important for you to change your habit as soon as possible.

Since this class meets every day, we should prepare ourselves daily based on the lecture schedule. To me, I usually read the textbook the night before. When I read the textbook, I try to have a brief idea on the concepts and methods, and write myself a note on things that I feel confused and important. This note gives me a purpose on what I should focus during lecture. Also, it is important to do assigned homework every day. If you have class after, review notes before you do the homework. If you don't have class later, then try to do homework after the lecture. I did homework right after the lecture because I can get the result of how much my brain has absorbed from doing homework. Although the professor might not be able to finish one section every day, we should do homework corresponding to the materials that are present in the lecture. Only if we do homework, we could have problems to ask on the next day and compare our methods with the teacher's method to have our intuition.

Mr. Lo has office hours daily and it is helpful for us to spend some extra hours with him. During the regular office hour, we could ask him questions that we don't have time to ask during the lecture. If there is a group tutoring meeting, we should also attend it as many times as we can. It is important to make good use of these meetings. We might not have questions all the time, but we should still attend the office hour meeting. During the meetings, we can know what questions our fellow students have. We can learn a lot from these questions. For instance, I asked a question during the group tutoring and we tried many different ways to solve the problem. Although we still couldn't solve the problem, we have ruled out some wrong choices for us. And sometimes, we might get some insights if we discuss problems with our fellow classmates.

Before having calculus, we have already taken algebra, trigonometry, and pre-calculus. These courses become the foundation of calculus, and we need to use it to solve problems or make our lives easier by using them when we solve problems. At first, we should be able to solve polynomial functions and recognize formulas like perfect squares. It is very useful when we are trying to find maximum and minimum of a curve. From Algebra and Precalculus, we should also know the general shapes of graphs of polynomial function and natural log function and their domains. In addition, we should know the concepts of sequence and series. From trigonometry, we need to know the values of sine, cosine, tangent at some special angles, the general shape of graph of sine, cosine, and tangent, the trigonometry identities, and how to solve trigonometry equations.

In order to succeed in further calculus, we need to master taking the derivatives and integral of functions. We should know basic rules and methods for derivation and integration. Also, the basic concept of derivation and integration are the foundation of concepts we will meet in Calculus 1C. These concepts are built upon concepts we learn in Calculus 1A and 1B. They are just the extended version of them. In addition, we need to master finding the limit of any functions with different methods and the L'Hopital rule.

In a word, we should always review old material to refresh our brain and we might be able to get some insights which can be helpful for further study for any courses.

Three recommendations to succeed in the class:

1. Start on your homework early.
 - Doing your homework early will allow you to ask questions during the lecture when the topic is currently being covered.
2. Repetitive practice even when you know the topic is helpful.
 - Speed is an important skill in this class, doing problems faster (even the problems you're confident with) will give you more time to try and figure out problems you're not as adept at. Quizzes and midterms go by very quickly!
3. Brush up on skills learned from previous math classes, and then master them! Brushing up on them is not enough; you must be able to identify when to use these skills swiftly to allow yourself more time to solve the problem!
 - Many problems involve trig functions, identities, and lots of other things that you might not have used or seen in a long time. These skills will be important for your success.

Five skills from algebra, trigonometry and pre-calculus in order to succeed:

1. Pythagorean Theorem
2. Trigonometric Identities
3. Algebra with rational and exponential functions
4. Trigonometric functions and their values using radians
5. Finding the limit of various functions

Five skills from Math 1A-1B to retain for Math 1B-1C:

1. Product, quotient, and chain rules
2. L'Hopital's Rule
3. Integrating functions with various techniques
4. Remembering the derivative of trigonometric functions
5. Finding the area under a curve