

Advice to the IB Class of 2005

From the Class of 2001

As part of their first semester calculus exam, last year's calculus students, who were almost all seniors, were asked to answer the following question:

Think back on your experience in mathematics in the IB program. What advice would you give to someone just starting the program as a freshman? What possible pitfalls can you help this student avoid? What topics seem to have been most important and deserving of the most study? Your answer should focus on mathematics, but some of your advice might apply in more than one subject area.

Below you will find their answers. They have been edited only slightly, to remove specific references to teachers or courses that might seem prejudiced either for or against. More positive comments were censored than negative ones. This was done to encourage you to make up your own mind.

Thinking back over my experience in math, I have some advice to future members and freshmen. Whether or not they want to hear it is another matter, but I feel that these years of suffering in IB give me the right to say something about it. My advice is chill. Breathe often. Ten years from now no one will care about the grade you got on the quiz. Take a moment to realize that you are a member of a top group of students. Getting there was no small feat; therefore, math in IB will not kill you. Second, have faith in your teachers. Always try to look at the things they do as either to help you or that they have to do under mandate from the <adjective> school board politicians. This will help you get along with them and they will in turn go the extra mile for you.

Some pitfalls to avoid: Procrastination. I know everyone says the same thing, but it's true. Most of the time if you get stuck on a problem the teacher will be more than happy to help you figure it out. However, the day it is due, it's due, no excuses. If you have a question, don't wait to the last minute because then math really will kick your <body part (okay, it was just "butt")>. Also do homework of your own design in <class>. <Math course> is a necessary credit to get into any university even if you don't get the IB diploma. You must pass it; therefore you need to do homework to understand it. Other than that, enjoy math. It's great! It's perfect! In no other subject can you say there is an answer.

For me I had to focus on certain topics in order to get along. Probability. I hated it in Algebra, Algebra 2, trig, and calc. Sometimes I just don't get it. Combinations and permutations go right over my head. I have to sit down and just do problems until I get enough of them correct to be satisfied. Sometimes this abstract stuff really gets you, to. You have got to find a way to visualize it. Don't just do something because the teacher says to. Find out why it works, because then you'll be more likely to remember it. Also, algebra doesn't go away in trig and calc. Without that foundation you'll struggle. Long problems that require algebra are easy to mess up on with little mistakes because you are comfortable in the algebra. Study in algebra. If you don't do anything else sophomore year, work on math. IB is great if you don't stress yourself out with procrastination and thinking badly about your

teachers. This core group is a lot of fun if you let it be. Good luck!

Jacqueline Klein

I'm here to give advice, so listen up! There are numerous pitfalls in the mathematics that I'm going to tell you. Also, I'm going to give you my opinion in the most important to study. Now where shall begin?

One pitfall is to not do the homework. If you didn't learn anything from the homework, then you won't do well on the tests. Another pitfall is to ignore <teacher>. He doesn't assign any homework, but you still must learn, and you've got to do homework for that. So watch out. Another pitfall is to ignore the AP multiple choice, 'cause man they'll come back and haunt you!

The most important topic is the derivative. How do I know? It's a huge idea in calculus, but I still don't fully understand it. That's why my calc grade is a <grade>. So above all else, learn what you are supposed to.

In case I forgot to say it clearly, my advice is to avoid the pitfalls mentioned in paragraph 2.

Mike Hoyt

If I were to give advice to an incoming freshman, I'd stress the necessity of not procrastinating. As soon as you get the assignment, you need to figure out how much time it will take you, and plan accordingly. Otherwise, you'll find that you have to stay up all night writing a 1200-word essay that's due the next day.

Also, make sure you do your homework. These are usually easy grades that can either add to or help out test scores. Also, you may not care about your grades now, but you will when you're a senior. You may have high placement test scores, but most colleges want to see high grades, too.

The most important math subject to learn is algebra. You will be using it for the rest of the math classes you ever take. I know <teacher> doesn't make you do the homework, so why bother, right? Well, it can help you to understand it and if you don't learn it then, it'll hinder you in later math classes. Follow my advice, do exactly what you see, you can grow up to be just like me.

Clayton Tillman

What advice would I give an upcoming IB student about the math program and the IB program in general? First of all, I would like to start by saying that if you are already tired of the Pre-IB program, run. Run very fast and don't look back, because it only gets harder as the years go by. Trust me, I know, I'm a senior. But if you've decided to stick with the program until the end then I compliment you on your decision and will pray for you. No, but in all seriousness, the IB program is a challenging program and with the masterful expertise of <teacher>, who wouldn't learn and have fun doing it?

To begin with, one piece of advice that would be quite useful for the upcoming IB students is the one simple word called planning. Very few of us seniors have yet to realize the true meaning of the word, including me. But, trust me, it costs us a lot of trouble over the years that I would just like to have avoided. This word plus the elimination of procrastination is a good thing. This mathematics program alone requires a lot out of its students in both homework and class studying in order for you to get high grades in it. So, to think that you will be able to skate by with no problem through all of your subjects your senior year is a foolish thought. That is, of course, unless your name is <student>.

One other tip about the program to come is that even if you don't think that you are being challenged quite yet, just wait. It will come to you, I promise. My time came in my senior year mainly with the wretched Free-Response questions that gave me my only semester grade of a B in a math class. So I guess what I'm trying to say is don't get too cocky until you're sure you know what you're up against, besides the mastermind of <teacher>.

Some topics that have been of the most importance this year in mathematics were derivatives and trig functions. These topics paved the foundation that was later built heavily upon with more advanced ideas in calculus. These topics deserve the most of your attention because without the basis, problems arise later in the year. So, even if you think you know early concepts very well, study them some more to be absolutely sure. Then continue with diligent planned work, and always be sure to show your <adjective> work, every little step.

The last and final helpful hint for all you upcoming IB'ers is on a bit of a lighter note. This is that if you have not already, be sure to have at least a little fun in your entire high school years. IB has the incredibly nasty way of sucking the life out of everything you do. However, in order for you not to have a nervous breakdown, you need to get involved with something outside of school that is just fun to you and actually, yes actually put that above your school, work. I'm sure most of you won't have any problem with this like, per se <student>, or <student>. But, for the rest of you who have never seen an actual football game in high school, stop now, put down your pencil, and go get a ticket to the next one quickly.

Cory Peavy

The International Baccalaureate program is a very rigorous program. It demands time and attention to get good grades. Studying is a key factor to doing well and procrastination is a pitfall that many IB students have fallen into. As you go through your freshman year in the IB program, remember that it can only get better. Do what you need to do to get good grades because your ninth grade year will seem the hardest. This is due to the transition from middle school to high school.

When enjoying the IB curriculum I recommend you keep up with your work. Once you start procrastinating you can't stop. It turns into a habit and then you don't do your extended essay until the night before it's due (4000 words). Your math classes being the most important, you need to study everything you can because you're going to use it all when you get into trigonometry and calculus.

Try to take easy electives for the A and if you are athletic I would recommend sports. They allow you to take your mind off school while you compete, hit or tackle relieving the mounting stress. When studying remember not to just memorize but understand as in your math classes. Last of all, be glad when you are in eleventh and twelfth grade, for then you are going to graduate soon, and you have <teacher>.

Tobin Morelli

Thinking back on one's experiences in mathematics in the IB program is such a wonderful thing. It allows one to reflect on the joys of mathematical paradigm shifts and other changes over the course of this long and arduous journey. It is hard to deny that the first day in an IB mathematics classroom is an incredible turning point for many students who had not previously recognized the full degree to which mathematics can play a part in their lives.

Such leads one to endlessly wonder what could possibly have been done better. And while nothing personally comes to mind, others have mentioned that their success in the IB mathematics program has been facilitated by a large amount of dedicated study, the brilliance of the IB mathematics teaching staff, and many other aspects, all of which have allowed them to expand their mathematical horizons, receive many adulations on their IB and AP exams, and seek further mathematics as the opportunities present themselves.

So, in order to avoid falling into more desperate straits, one must avoid any sources of mathematical turmoil in always remembering that the good mathematicians are the ones who get the answers right. On that account, it becomes necessary to put a renewed vigor into one's program because all topics are worthy of study and should be understood to ensure further mathematical success.

Matt Nettlow

The first thing that will do you good is to really pay attention and work in geometry. Though it seems the things you learn will never help you later in life, they will — in 11th and 12th grade. Learn the theorems and postulates relating to angles and triangles. (Also, if you don't work your tail off in geometry, your GPA will forever suck).

<Math course> can, for the most part, be ignored. Try to learn and keep your grades up. Anything important can be learned in <math course>. <Different math course> is not fun because most of it is memorization. Luckily, <teacher> has you memorize the minimal amount of information. Try to memorize the information the first time because you will be quizzed and tested on it over and over again — even in <math course>!

Happily, <math course> is much better than the previous three years. Calculus is getting to use all the information you've memorized and getting to see how it applies to real life. It's not easy, but it is easier than <math subject>. Do all homework assigned — it really does help.

I wish you the best of luck — you'll need it.

Amanda Ramos

Hey, hey! Welcome to IB! Time to start learning more than you ever thought possible — and I'm not just talking academics here. You're gonna have to keep up with the game, appreciate the help and encouragement of those around you, and learn to sleep standing up.

More specifically, you definitely have got to keep your eyes on the prize. You're not in this math class to learn how to most efficiently count the dots on those little ceiling panels (although the idea is definitely very cool ☺). <Math teacher>'s cool, she'll teach you well, but you have got to put in your work. Trust me, it's a very rewarding feeling to *actually get stuff right with your own brain!* ☺ (Novel concept, I know.) I strongly recommend you take good notes and for heaven's sake - work on this stuff with classmates. (No, I don't mean "checking" their answers and keeping a running tally on your own paper.) You might be surprised how smart your classmates actually are. And if you've got someone like <student>, *cling on for dear life!!* ☺ It's really simple — do your work *before* the day it's due, and your day will thank you for it. (Bad math grades suck, but stress sucks worse.)

I can't tell you what subjects you should study most - I'm not you and I don't know your strengths and weaknesses. All I *can* say is this — pay attention in class! Take notes! Do homework! Get help if necessary! And first and foremost, remember that this is in no way a death trap — I'm still alive! ☺ If you're not comfortable with a certain concept or something, ask! Chances are that stuff will be the foundation of new stuff. And you need new stuff (says the guys over in Switzerland.)

Good luck and have fun!

Jessica Watkins

Speaking candidly, the current IB seniors have continually evaluated each class and series of classes as we have progressed through the program. Some classes are judged, for the most part, to be utterly worthless in both conception and implementation. Others we deem to have a good idea behind them, but the execution of the idea is or was flawed. But there are some classes which we mostly find to be excellent. These are the classes which are obviously beneficial to us in the future, and enjoyable, are not torture to sit through, and provide us with skills and projects which we can hold up and display. <Math course>, and prior to that <math course> are classes like that.

However, those classes are not available to most IB students until they become juniors or seniors. As a freshman, the prospect of surviving four years of IB is daunting. In math, especially, the theorems and postulates can be truly overwhelming. My advice to these poor, innocent IB freshmen would be to do several crucial things which will help them immensely later in their IB careers. First, they should learn how to use a TI-83 in the most beneficial manner. The fact is that in the real world these kids will probably be depending much on a calculator for anything more complicated than adding single digit numbers. I sure do. A second piece of advice would be to make sure they can apply the ideas they are learning. I know that I have forgotten many of the theorems which I do not habitually use.

The topics which seem to be most beneficial are those which will help us in real life. I got a lot out of derivatives, especially as how they apply to graphing and modeling velocity. That relationship between position, velocity, and acceleration is fascinating. An area which I think I need more time on is logarithms. The name is frightening, and I think that may have scared me right from the start. I am not totally clear on how I am supposed to approach a logarithm, nor could I describe a natural log if I had to. However, that is where TOK would help. That class would fall in a different category than <math class>, but it did help us learn how to talk in circles if we don't know what we're talking about.

Will Fowler

If I were to happen upon one of those stupid freshman IB losers, I would tell them to avoid studying at all costs. This way then they can go act stupid instead of worrying about falling behind in their math homework. During tests, though in reality they contain problems easier than in the homework, I would tell these students that these are as hard as heck and that they constitute 70% of their grades. To make them even better, I'd tell them to completely avoid studying derivatives and trig functions, and instead focus on more worthy topics such as the conspiracy theorem for calculus, perhaps applying matrix algebra only to TOK. Hopefully, this advice should eliminate all those losers. HAHHA!!!

Doug Carman

[Editor's note: This is Doug's anti-essay.]

As an incoming student into the IB program, mathematics is probably one of the most important subjects that will affect your future. Mathematics is a subject that accumulates as the years go by, or each year the mathematics class is dependent on knowledge acquired in the previous years. So, if you get behind, this is the worst thing you can do. If you do this, you must play “catch-up” and that is not fun to do.

Being an upcoming student in the mathematics program at IB, it is important to not fall behind, as mentioned earlier. You will already have plenty of work for other classes, and more work than usual in mathematics is not a good thing. Ideally, you should try as hard as possible for your brain, for the world’s language is mathematics and the universe *is* numbers.

In conclusion, the topics that need most attention as a whole in terms of studying are the topics that the teacher makes known to you. They know how to prepare you for the IB exams, so just study the topics made clear by them and you will do fine. Have a great 4 years of nervous breakdown MATHEMATICS!

Grant Harley

My experience in the IB Mathematics Program has been long and fruitful. The incoming freshmen are just beginning to enter the cave which contains the treasure chest of mathematical comprehension. This treasure is more valuable than silver or gold, and is therefore treacherous to reach. The path is fraught with danger and the way is difficult, but trust me: it is a worthwhile journey.

There are many forks in the path. It is easy to become sidetracked by incomprehension, or to fall into the pit of procrastination. As you traverse through the cave, it is important to keep a strong footing by learning and understanding each new concept. A theorem or concept learned in Algebra 2 or Geometry will likely become necessary again in trigonometry and calculus. Algebra 2 becomes extremely important in Calculus. Algebra is that lamp thing on your hat that will guide you towards the treasure. You should do at least some of the homework that <teacher> assigns, even though it is unnecessary. It only takes a few minutes, and it will undoubtedly increase comprehension. Factoring is another important tool from Algebra 2 on. Learn how to factor! I have no idea how to factor, and it has been a great hindrance in my journey.

As I near the treasure trove of mathematical success, I realize that all of the hard work has been worthwhile. I am about to partake in immeasurable academic wealth. Don’t worry, freshmen. There’s a treasure chest waiting for you, too.

James Chappel

As I look back on my fun-filled years in math class, I see that this class has been my favorite of all my classes, real classes anyway. Real, get it, not imaginary. Ha Ha Ha Ha Ha Ha Ha Ha Ha Ha Ha Ha Ha Ha Ha Ha. Anyways, although this was my favorite class it does not mean that it was an easy one.

My advice to the incoming <math class> students is to do all of the homework and make sure you understand the concepts behind the problem. Even if <teacher> does work some of them out in class so you could copy them, try as hard as you can to do them at home, and only use her help as a fallback. The main reason for this is to master the concepts. Ideally you would learn all the homework problems that she works out in class, but usually you are too busy copying down the answers off the board to care what is being said.

Other advice is obvious. Listen to her teachings, they aren’t half bad. Study the things you have problems with. And if you are in physics, try to connect ideas from the two classes together. Physics is math-based. That way physics can help with <math class> and vice versa. If all else fails, maybe an extra credit song can be arranged with <teacher>.

Chip Rouseff

To students just starting the IB program I would have to say, “Run! Get out while you still can.” Well, actually I probably wouldn’t say that, but be sure this is where you want to be. If it is, then you are in good shape, because it will pay off come time for college admissions. As far as math goes, however, there are certain things you should watch out for. Some of these are important to know for calc or trig, but others are a bit broader.

One thing I would mention is proofs in geometry. That’s the only time you’ll be required to do them, but I’d suggest paying attention. This does not necessarily mean that you need to be overly concerned with memorizing the theorems, etc., but know how to get from one place to another using a set of rules. If you’re at all interested in computers this will help out a lot, as it’s only about a half-step away from algorithms. If you’re not, just forget what I just said.

I would also suggest making sure you are good at algebra (basically just solving equations) because each class just gets more and more into it (calc is like Algebra 9) and if you fall behind there, you’ll probably have problems. Finally, tease <teacher>... it’s fun (and a great stress reliever).

David Nikdel

For all incoming freshmen, my best advice to you is come with a lot of spare time and graphing calculator(s) (possibly 4 or 5 if you're like me). These come in handy for almost all classes except English, history, or art. Most teachers let you use a calculator on your tests. Make good friends with the upperclassmen.

As for math itself, the biggest thing you could do is learn sin, cos, tan, and all of those. They don't go away! The sooner you learn them, the more A's you'll make.

There is one thing I recommend you leave behind, though — any semblance of a life. It is neither needed nor does it fit into your schedule. I warn you: You may go into withdrawals at first, but don't worry, soon you'll forget what it was like to even have one.

Meredith Blount

First of all, know your limit as to the amount of work you are capable of doing. Do not exceed that limit. Also, nothing can be perfect. Striving for perfection is a good quality, but it shouldn't be your only quality. If you're perfect you will intimidate others and they won't like you. I am not saying that friends are the most important thing, but they do help you to relax and relaxation is a key to success.

The most important thing to remember is to try to do your homework early. Also it is important not to take on too much. Extracurricular activities enhance high school, but they should only enhance, not consume. Furthermore, schoolwork shouldn't consume the rest of your life. If you do have problems in math, here's some advice. Math is a cumulative subject so if there were any problems in higher math, they may be stemming from the lower math like algebra or algebra 2. It is important that you know everything well enough that you can know how to do it a year or two later. Also don't just rely on your calculator. It isn't always going to be there to help you. Teachers shouldn't be the ones that bring your grade down. You know there are always other people than the teacher knowledgeable enough to guide you.

Good luck in IB with math and everything else.

Katherine Bentley

I suggest that you get your priorities straight. IB takes hard work and dedication. I also suggest that you get a head start on all the projects and summer assignments. You will need it. However, IB is worth it.

The math department is excellent if you take Trigonometry/Analytical Geometry in your junior year and Calculus in your senior year. I didn't take math studies, so I don't have any information on that. The teachers are helpful. If you don't learn what you are supposed to know in algebra 2, you will have to make it up in the first semester of the junior year. English and math will need the most study.

If you follow these suggestions, you will have four successful years in IB. It is tough, but hang in there. Good luck!!! ☺

Divya Gowda

If I had the ability to offer advice to the incoming freshmen, it would be as follows: learn algebra. The necessity to comprehend and apply algebra is much greater than I had ever thought.

Along with algebra there are other necessary skills to succeed in a program like IB. Forget having a job. The stress and time isn't worth the effort. If you need help, ask. The teachers really are not evil little beings set out to ruin your life. They know what's best for you and want to see you succeed. Allow them to help. Listen to them: most of them know what they are talking about.

Overall the program will be a learning process. I cannot eliminate your conflicts, merely address the ones that I saw in hopes that you will use the information to your advantage.

Have fun.

Carmen Glotfelty-Ortiz

My experience in mathematics in the IB program is somewhat unusual. I am in a class with students mostly a year older. This has its advantages as well as its disadvantages. I believe that those entering the IB math program a year ahead could learn more from my experience that those entering regularly.

A disadvantage of being in a class where you are a year behind in the rest of your classes is that you do not see the other students on a daily basis. This can hinder your ability to get help on homework, projects, etc. However, you do hear what you will have to prepare for next year and they can help you with what you have not even started.

I definitely believe that procrastination in math (as well as other courses) is the downfall of the IB student. I would advise to do homeworks in a timely manner so when portfolios, tests, and free responses are due, you are able to account for all your points.

In <math class>, learn basic concepts first, and if you don't understand, as your teacher. All throughout, math is built up on these basic, fundamental concepts, and without a full understanding of the foundation, the complexity of future concepts will be very hard.

My best advice in mathematics in IB is to do homework to practice skills, and ask for clarification. Usually the math will come easily with a clear understanding of the concepts.

Jacob Belcher

The best advice for anyone beginning IB who intends to stay is to actually study and learn the information. The problem is that incoming freshmen have never before needed to study. They need to learn how in order to make the kinds of grades they did when they were in middle school. Don't wait until five minutes before the test to learn the theorems. Although they are a pain to remember, they were designed to make geometry easier; it just doesn't seem that way until later.

Learning time management is essential to a successful IB career. Getting every problem right isn't as important as learning the general process. More than likely, spending 20 minutes on a really hard problem won't do anything but frustrate the student and put the workload later into the night. Flashlights are handy on the bus for doing homework not understood the night before. A clear mind can help to solve the problem.

Paying attention in class is a major bonus. Looking up how to work the problems in the book only takes up more time at home. The teacher may explain something better than the book does or show a different, easier method.

Beth Robertson

The advice I would give to IB freshmen starting the IB program is to stick with it. It is hard to understand sometimes but just try and learn. I especially have had problems with math, but eventually I understood. Taking time to study is also good. Study and perseverance is the key to IB math.

There are several pitfalls that this student can fall into. There is the not-studying pitfall. This applies to any subject. If a student does not study then the student has the distinct possibility of failing or at least not understanding. Another pitfall would be to not ask for help when help is needed. If you need help to understand, you should ask, because in math it seems everything builds on itself.

The most important topic to me would have to be between trig and calculus. I like calculus more, but there are a lot of trig identities that you should know. Thus trig probably deserves more study because it helps when studying calculus.

Philip Page

To someone who is just starting the IB program as a freshman, the advice that I would give him would be to be willing to make an effort to succeed in mathematics. Without being willing to make an effort, it will be difficult for him to succeed and make an acceptable grade in the class. One key way of making that effort is to be willing to get help when it is needed. Granted, it may take a person swallowing his pride, but it makes no sense at all to keep going and trying to do the work when the person does not understand. One thing that I have learned is that all of the work done in math continues to build upon itself. Therefore, if something in the beginning is not understood and help is not received, when that area comes up again, it will still not be understood. Therefore, be willing to make the effort to make the grade, even if it means giving up some personal time to get help when it is needed.

There are going to be pitfalls in the four years of math, but they can be significantly reduced. Like the old saying says, we learn from our mistakes. Now, as we have learned from our mistakes, we can pass our suggestions along to you. One of the greatest pitfalls, although perhaps something that can't be avoided, is procrastination. Although it may not be able to be avoided, it can definitely be reduced. I can't stress the importance of doing the homework, portfolios, and free response ahead of time enough. That way, if you don't understand, you can get help. Another pitfall is not being completely prepared for a test. Granted, [in some classes] the tests can be taken again, but without being prepared, it just adds more stress to have to find the time to take the tests again. Many times, it is the fact that the tests can be taken again that lead a person to believe that he doesn't have to study as much the first time. This is definitely not a good philosophy to go by, as it just adds more work later to have to learn something that should already be known. Therefore, by avoiding the obstacles that can be controlled, the stress level of the year will be greatly reduced.

Of all the topics that were studied, it seemed that the algebra learned in Algebra 2 and the concepts that were learned at the beginning of calculus have been the most important and deserving of the most study. The algebra that is learned in Algebra 2 becomes absolutely necessary in order to be able to do the calculus that is later learned. Without knowing how to do the algebra, the later calculus becomes impossible. Just as the algebra that is previously learned is used again later, so is the calculus that is learned in the beginning of the year for calculus. Take for example the trigonometric functions, which are continually used throughout the year. Therefore, it is the units that form the basis for other units and are repeated the most that become the most important.

Jennifer Brasch

There are a number of key ideas that you must focus on in your years of the International Baccalaureate Program. You have probably heard them all time after time, but alas, I cannot offer anything past what I have experienced. First of all, I must say that you should pursue a number of different things to diversify your life and make it interesting. There are limits, however, and you will know that line when you cross it. It will be right before you run headlong into that “wall” that IB students become so familiar with.

Time Management is key as well. I know, I know, it sounds clichéd, but it’s true. Schedule your day and put everything in there. Don’t just say, “Oh, I’ll squeeze it in there somewhere,” because you might not. Try and leave yourself some free time, as much as you can (within reason, of course). In time you will realize the important things and the stuff that doesn’t really matter. This way you can plan your time accordingly.

Many of you will get little more than five hours a night of sleep. Be prepared for it because you don’t really have much of a choice most of the time. Over long periods, this really screws with your body’s chemistry. Aim for eight hours. If you don’t get that much, you’ll live, but don’t make it a habit to get less than seven and a half. I usually don’t get nearly that much, in all honesty, but I’ve never needed much sleep, only about four hours per night to stay awake the next day. Be aware of how much sleep you need before you end up sleeping through lectures and tests alike.

Be sure that all of your procrastination is in moderation! Your teachers will all tell you not to procrastinate, but there is nothing wrong with waiting to start that English paper until a day before it’s due. I do it often. Do, however, make sure you’re capable of completing it at the last minute and turn out something that is coherent. Don’t start so late that you don’t get any sleep (see rule 3).

Have fun. Find some way to amuse yourself, and try to keep a sense of humor at all times, even if you came into the program without one. If you’re upset about recent occurrences in class or outside of it, talk to someone. There are not a whole lot of kids in Bartow IB, so everyone pretty much knows everyone else and is willing to talk. Find something or someone to cheer yourself up. There are plenty of teachers that are here to help, so over the course of your high school career, you should befriend at least one that you can complain to. I also give you permission to blow off your homework (in moderation) when you’re pulling your hair out and need a break.

And finally, despite the fact that you are an IB student, you are not perfect. If you come short of a 100% on your calc test (not uncommon for me), LIFE WILL GO ON! You may not get a 4.0 this semester. LIFE WILL GO ON! <Teacher> and <non-math course> may be way too abstract for you. LIFE WILL GO ON! <Teacher> may appear to speak in tongues. LIFE WILL GO ON! School is tough. The point is to challenge you, so get over yourself. And remember, if IB were not

intended to make us all go crazy, they wouldn’t call it an “institution of higher learning.”

Kevin Browne

The mathematics program in IB is quite rigorous. To an incoming freshman I would advise that they just stick with it and tough it out. There can be a heavy workload at times and the concepts may be tricky, but if you do the assignments and pay attention you’ll do just fine. Also, there’s always friends to ask for help and the teachers are usually more than willing to help in giving extra explanations.

There are some pitfalls to avoid. For example, if you put off one section or slack off on a chapter it may come back to haunt you. A lot of the material that you learn ties together with future material so it is important to get a solid background. Also everyone is open to careless mistakes, and sometimes those can mess up the rest of your calculations. So, be sure to check your work or at least make sure that your answers make sense. Also, you’ll later be expected to show your work on the AP exams, so get in the habit of showing where you got your answers.

The most important topics have actually been the basics. As I mentioned before, it’s essential to get a good background. There are many calculus problems which involve a good background in Algebra 2. Some of the topics that I personally have found interesting are iterations and derivatives.

Therese Medalle

Sucks to be you. High school, even math, can be hell if you make it so. Don’t procrastinate, and respect the authority of the teachers, and the IB program is a cinch. Take notes in <teacher>’s class, and in <teacher’s> class, and everything will be a’ight.

The only pitfall that it is essential to avoid is procrastination. Even though the Buccaneers game is more important than school, completing homework is necessary. Thus, try to avoid consecutive nights of 45 minutes, then three-hour sleep sessions. Also remember that <teacher> is the only teacher who is ALWAYS right.

Finally, there are no topics which are more deserving of attention, that is, except English and TOK. All TOK and English assignments can be completed half-heartedly, whereas all math assignments require a vast amount of attention. Copying out of the back of the book is morally wrong.

Brian Barnes

There are several key aspects that a new freshman (or woman to be politically correct) must realize when they enter the IB program.

Math is always fun. Always. No matter what grade you get. This is the key to the key aspects. Math teachers love to see that you love math, even if you are really crying like a little girl on the inside. Suck it up and ask for help, for if you try to rely on your own abilities you will be having nervous breakdowns all of the time.

The second key aspect is that there are good (everyone) and bad teachers <teacher> in this program. You will get the chance to experience each of them, so don't get too anxious once 10th grade rolls around and you have algebra 2. Once you reach the good years (11th-12th), choose the real math class — the one with trigonometry and calculus. [Editor's note: Trig and calculus are not the right choice for everyone, and you don't have to decide until the middle of algebra 2.] You'll thank yourself in college, since you'll have more knowledge of math than most of the other students since <teacher> knows more math than most people in general. Your newfound math abilities might even score you a hot date with the class idiot. You never can tell.

The third key is that you want to do your math portfolios and free response sheets well in advance of the due date. There's nothing worse than opening your math folder at 9pm to realize that each of the eight free response problems takes 30 minutes apiece. If you start ahead of time you can ask the teacher about any errors, or maybe any hints, with your work. This year's seniors had the intelligence of getting together the day each of the free response sheets were due in order to iron out some discrepancies. Don't forget: you can work with others on the free response, just not on the portfolios. As to the portfolios, just think about what the question is asking. Sometimes the correct method will suddenly click. Another hint: the portfolio usually has something to do with the next thing that you will be learning, so look ahead and check out the general methods. Otherwise, happy discovery!

Fourth on the key response is the decision over which subjects to study first, and which ones can potentially be ignored. I don't really remember much about 9th grade, but try really hard in English. If you learn how to write well and be precise, the next three years will pose little threat. If you slack off you will have to retake the class while taking English 2. Bad idea. English 2 is also called pre-ToK, so don't bog yourself down by messing around. Concentrate on World History as well, for the big IB exams have questions about Russia and some other events that don't coincide with American History or with the History of the Americas. When you hit 11th grade, ToK really doesn't require much but talking about random things in class. It's interesting, but not pivotal. Just do the ToK essay in 12th and you'll be set.

Point five: pick a good extended essay topic. You don't want to get an elementary paper, and you definitely don't want to be 2000 words into the paper and realize that you've run out of things to say. Research before you

start writing so you can pick a good subject and title. If you think that you did well on the mini-extended essay in 9th grade Inquiry Skills ... prepare for a new ballgame with the real deal. You don't have a prayer if you wait too long like <student> did. Plan it out.

On a final note, remember that a few little mistakes should not lead you into dropping out of the IB program. This is a really great school, and most of the teachers here are very good. If you want to go to a big college, remember that they eat the IB stuff up. You're challenging yourself by being here, and are thus learning more than the average student could have imagined. If you are having lots and lots of problems (like some seniors have been having lately), then maybe you should look into high level classes at your zoned high school. Ask for advice before dropping out. Once you say that you're out, you can't take it back. The education that you receive here is the best that you will receive in the state ... we aren't #1 for nothing.

Brent Radcliffe

Starting the program as a freshman, an individual should prepare himself to work diligently and be willing to sacrifice his social life for school. However, it is ultimately up to the individual on how much free time he will have. Time management is the key phrase for surviving IB. The best advice that I can give to a freshman would be to use all spare time (i.e., Jacket News, announcements, breaks between classes) at school to finish assignments.

The student should be aware of the <course> pitfall. This pitfall occurs for most IB students because of the course's setup with homework, which is not graded. In other words, the only grades that student receives for the class are test and quiz grades. The tendency of most students is not to do the homework. However, it is important to do the work no matter how trivial it seems. Doing the homework will teach you the material.

Topics that have been the most important and have deserved the most study include the following: 1) graphing functions, 2) finding limits of functions, 3) basic trigonometric identities and functions, 4) derivatives, and 5) integrals. An interesting aspect to these topics is that from high school math in general and the IB physics courses, many of the topics overlap each other. Because of this crossover, the two courses work hand-in-hand and allow a student to gain valuable insight into the topics because he is given two different points of view. Thus, personally I would recommend that a student who is interested in pursuing a career in engineering or another heavily mathematics-based career should pursue calculus and physics when the time arrives to make those choices.

Ken Patterson

Math ... the true path? Absolutely not. Math is not the way to find certain truths. It is not a philosophy which one should live his life by. However, it is a requirement in the International Baccalaureate Program, and it is for good reason. The skills learned in math help us to solve problems throughout our lives, but all that a student has learned in all of his math classes will be of no help dealing with the problems that pop up once taking an International Baccalaureate Mathematics class. Only experience can solve the problems that come with IB math.

Homework.... Is it really homework? No, homework is work done for the home, at home. Society would say homework is work from school meant to be done at home. Come on. If we were to apply the accepted definition of homework to... say — schoolwork, then by doing schoolwork a student would wash the dishes from his house at school. Nonetheless, “homework” is given, and it must be done; if homework were not done, the world would explode. Homework is necessary because it allows the student to experience mathematical concepts, and it is through experience, through discovery — not imitation, that a student may fully know — may understand.

Math necessitates work. Do it. Methodological biases run rampant throughout the IB math department. This will never change. Students must deal with it, but students should never accept something wrong without resentment.

Ha ha. Ha ha. Ha ha.

Jared Hartman

The best advice I could give someone starting the program as a freshman is to make sure you really *learn* the math you are taught because, starting from your first math class here, everything builds!

Some pitfalls to avoid would be: cramming for tests, copying other students’ work or out of the back, of the book constantly, and not taking the time to really learn the material.

The most important topics, I’d say, were derivatives and antiderivatives because they were the easiest and most fun! The main thing I would stress to new students is the importance of truly studying, reading all your books in English, and getting plenty of sleep. You have a long road ahead of you that many have traveled so take my advice, I *know* about IB.

Andrea Labis

So you have decided to join the IB program. Well, I hope that you have thought about this long and hard before choosing. IB is not the typical high school program and it is certainly far from being like middle school. The worst subject, if you are not good at it, at least, is mathematics. I say this because IB students usually are bright and clever enough to get by in their English and even History classes using pure BS. However, in mathematics, there is only one right answer and you cannot be vague about it. This subject you just have to know.

The greatest advice given to me in studying mathematics is this: memorize and then understand. Of course, understanding is the best way to learn; but when you do not understand something, you just have to keep on trying and practicing until you do. When I committed theorems and formulas to memory, I was able to identify the situations when to use them. Once I got the hang of things, I could begin to learn the idea behind them. Using this method, I now appreciate the importance of critical numbers in finding the absolute extrema, I now know that when taking antiderivatives I have to divide instead of multiply. It is quite frustrating to learn something when you do not even have an idea of how to begin to explore it.

By the way, when you come across a teacher who does not assign homework but instead advises you to do some practice problems, **DO THEM!!!** I cannot stress this enough. This was the pitfall of so many students, including me, in <teacher>’s class. You should always remember that learning, not playing around and doing nothing, comes first. Besides, not spending thirty minutes for a sheet of problems can haunt you in the form of a 65% on the semester or final exam.

Lastly and most importantly, **DO NOT BE TOO PROUD TO ASK FOR HELP!!** That adult sitting in the classroom is not being paid his humble salary just to decorate the room. Use the teachers to help you. That is their purpose. <Teacher> is wonderful in this aspect because she helps, but she does not just give you the answer. She does not treat you as if you were stupid either. With <teacher> I cannot promise you anything. You will have to wait and see. Tough luck!

Niña G. Caculitan

[Final editor’s note: Many students made reference to a math class in which homework was not collected, and without fail they advised that those assignments be done anyway. The teacher to whom they were referring no longer teaches that course, so you will probably find that all of your math teachers will collect homework.]