

Finding Help -- Locating Resources

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More FREE help available from my website at www.mathinlivingcolor.com

Barney's Success Story

A student named Barney signed up for his first college mathematics class. Barney was a classic “non-math” type student. In high school he was a mild-mannered student who was well-behaved in his classes. He liked art class, and he seemed to have artistic ability. Barney just had no talent nor interest in anything to do with math. Math seemed to be over his head, and he just didn't care. After spending two years in high school Algebra I, he finally finished with a D in that class. He later said that on the multiple-choice final exam, he had no idea what he was doing, so he just put down answers without even reading the questions! He was thankful even to get a D in that course. (In those days, a D was considered “poor but passing.”)

Barney had always wanted to become a doctor. However, because of his lack of math skills required for medical school, that dream was clearly impossible for him to consider.

In his first semester in college Barney enrolled in a low-level math class. For some unknown reason, Barney began to do the homework that was assigned. He not only DID the homework, he did his homework with neatness and organization. When he was praised for the neatness of his homework, Barney responded with a quality of work that was beyond neatness. His homework now was done with precision! His artistic abilities took over and his work became a model of neatness and organization for years to come. Because of the clarity of his own work, Barney discovered that he was really very good at math. He surprised himself with an A in the class.

Thinking that perhaps math wasn't so bad after all, Barney proceeded to take every math course at the college—from Beginning to Intermediate Algebra, then College Algebra, Trigonometry, and even Calculus I, II, and III. Believe it or not, Barney actually made A's in every course! He later transferred to a major university to complete his degree.

Imagine that? Here is a real student who spent two years earning a D in first level high school algebra then went on to make straight A's in the entire community college mathematics curriculum!

Where Can I Find the Help and Support I Need To Succeed in Math?

It is important to locate resources before problems appear. Resources include your instructor (do not be afraid of him/her!), textbooks (additional textbooks besides the one in class), students in the class, friends who can help you (on your level), videos, computer assisted learning, learning centers, and tutors.

The good news, once you become serious about learning math, is that you are not alone on a desert island (although that desert island might be a nice fantasy right now!) with no resources to help you in your effort. Hopefully by now you are working on your attitude (beginning to believe you will be able to do math), changing your behavior (spending more time and better quality time working on the math), and increasing your commitment and discipline in your work. These are internal by nature. Now, in order to maximize your efficiency, you need to be aware of and take advantage of external resources.

Math Success Secret

It is most important that you locate these external resources *before* you have trouble and *before* you get behind in the homework.

Math Success Secret

According to research, it is most important that you not become isolated in your effort to succeed in math. It is so important to locate your resources and become a team player with other members of your class to work together in a cooperative effort to learn the skills you need to be successful in math.

Your Instructor

Your most important resource should be your instructor him/herself. The instructor is the one who has the best perspective on the subject matter, the course requirements, and your needs compared with his/her expectations for you in the class. Most instructors are expected or required by law to keep regular office hours in which they can be available to help students.

During your math class, there will probably be an appropriate time for you and your classmates to ask questions. While doing the homework, make note of the problems that you have and the questions that you need to ask. If you have *many* questions, then get some of them answered outside of class by your instructor, by classmates, or a tutor.

It is very important that you as a student ask for help. Do *not* be intimidated by your instructor. Even if he/she *looks* busy, ask for help anyway! This is why instructors have offices and office hours. When you do ask for help, be efficient with his or her time. Have your homework done in a neat and well-organized fashion with specific questions ready to ask. As you do the homework, you should make notes when you have questions or when the problems do not come out right. In this way, when you go to your instructor or tutor, you can show him/her that you have made a reasonable attempt at the homework, that you are a hard worker, and that you are serious about learning these skills. It makes it much easier for them to give you answers if you have carefully summarized your questions. Also, remember that there are other people of whom you can ask questions, including classmates, friends, and relatives. Be careful not to ask so many questions of any one person, especially your instructor, that you become a burden to them.

Learning Centers

While it is a good idea to ask questions of your instructor, remember that he or she does not have time to give you private tutoring. It is likely that you will have more questions than any one person can answer. Many schools have one or more learning centers with tutors on duty to help students who have questions in a variety of disciplines, especially math. Your first step is to determine what facilities and services are available in your school and/or community. Next, inquire as to hours of operation, charges if any, and policies. Some learning centers may have tutoring by appointment, while others may have tutors available for drop-in tutoring.

When visiting a learning center, you should try it at different hours of the day and different days of the week. Some hours and days are busier than others, so it will be helpful to find a time when the tutors are not overwhelmed. Also, by trying different days and times, you will see a variety of different tutors. Remember that tutors are people too, and they come with a variety of personalities and skills. Some tutors may have great math skills, but lack patience and communication skills. Some personalities may clash with your own. Whatever you do, do not judge the learning center by your experience with one tutor.

This is why it is so important to try a variety of tutors at a variety of times, to find the best tutor for you. It is important to find a tutor who can explain the math in a way you can understand. A good tutor (or instructor!) does not make you feel inferior or stupid!

When you find a good tutor, be efficient with his/her time, and show him/her that you have made a reasonable attempt at the homework. Have your problems organized and specific questions ready to ask. If the tutor is busy helping someone else, then you should be working on your homework or getting your next question ready to ask. Whatever you do, do not expect your tutor to do your homework for you!

Math Success Secret

**After receiving tutoring, go back over the work yourself, and make sure that
*you understand it!***

Classmates

One of your best sources for outside help may be sitting right next to you in class. It is so important that you establish contacts within the class. As we said before, *never allow yourself to be isolated*. It goes without saying that you should choose your friends wisely. Nevertheless, as you attend the class day after day, you will begin to recognize classmates, and they will recognize you. It may be helpful to stay after class or to meet with classmates before class to ask questions of one another and share information. Such meetings could become friendships, which could be valuable resources even in future classes. It is especially helpful, in case you miss class, to have someone you can call to get the assignment, pick up handouts from class, or ask for help. Likewise, you can be a resource for classmates in the same ways.

Math Success Secret

Form a study group!

Success Story of a Student Named "C"

I have always experienced road blocks with all types of math. It did not necessarily matter what level of mathematics it was, but I had negative encounters with these classes until I registered at my local community college.

It was at this community college that I enrolled for three consecutive classes: Intermediate Algebra, College Algebra, and Finite Math with an incredible professor. It was here that my instructor not only supported us in our endeavors with math no matter what level we were on personally, but he also gave us some insights on how to prepare for these classes. Over the next year and a half, I began to see the results of hard work that I had invested myself in, including doing all of the homework! Our professor strongly encouraged this exercise, and to my surprise, doing all of the problems really did help in preparing for our daily classes and also all sorts of exams in the future, because each math class builds on another. In addition to completing all of my homework, I also hosted study groups with some friends of mine from class, attended class regularly, and asked lots of questions while I was there! One last thing that really helped me in successfully passing these courses was the textbook. I was pleasantly surprised to find the textbook that we used was quite readable. The teaching methods in class reinforced the methods explained in the textbook. I found this to be quite helpful.

The words of advise that I would like to pass along to students everywhere is to keep up with the homework! Don't ever be afraid to ask questions! I was blessed with an energetic and encouraging professor for those eighteen months. However, there are plenty of good teachers out there who are there to help their students.

I am proud to say that I have now successfully completed all math requirements to graduate from my community college! If I can do it, so can you!!

One of the best resources you can have is a **study partner** or a **study group**. Sometimes it is possible to have a very special friend or group of friends in the class with whom you can do homework on a regular basis, study for tests, and even go on to the next math classes. Remember, it is okay to work together with someone on homework, as long as you make sure that, when all is said and done, you understand the work!

Remember -- It takes three or more strings to make a rope!

Friends and Relatives

While your best resources are probably located in or around your math class itself, it is important to locate all possible resources, before you have trouble with math. Among your friends and relatives there may be someone who can help you. Remember, to be

helpful to you, someone must be able to help you to understand on your level and without making you feel stupid in the process. Often friends and relatives are too close, or they may lack the communication skills that you need for outside help. Whatever the situation, try to get as much help as you can, without straining the relationship or friendship. Be careful to get help from many sources, taking care not to exhaust any one person. If your friends begin to hide when they see you coming, you are probably asking them for too much help!

Private Tutoring

If you need more help than you can get from your instructor, from your learning center, and from classmates, you may need to hire a private tutor. Again, it is important to get the right tutor. First and foremost, a good tutor must have solid math skills. However, good math skills are of little value to *you* unless the tutor can explain the math on a level that you can understand, and in a way that makes you feel good about learning. The attitude of the tutor, including an attitude of patience and encouragement are equally essential.

One of the best places to find a tutor for hire is from your local learning center. In this way, you can take different tutors for a “test drive” to determine which tutors have the math skills, the personality, patience, and other qualities you are looking for in a tutor. Tutoring rates vary based upon tutor supply and demand, geographic area, level of math, experience of tutor, and a number of other factors. Rates may be negotiable. If you cannot afford the price of tutoring, then get together with other class members and share the cost of a tutor for a group session.

You may also ask your math instructor to recommend a tutor, or you may want to check local advertisements and bulletin boards. Especially in the latter cases, be sure to ask for references, and check for satisfied customers before hiring a tutor that you do not already know.

Books and Videos

In addition to “people” resources, there are many additional resources that may be helpful to you. While you have a textbook for your class, there are many other textbooks in the market that you may find easier to understand. As with people, some books are easier to understand than others. These may be available for checkout from your library or learning center, or they can be purchased from your local bookstores. You may want to ask your instructor for recommendations about supplementary materials for extra explanations, examples, and exercises. You may want to ask your instructor if he/she has written any supplementary materials, especially practice tests, that would give you extra practice. In this way, at least you have demonstrated to your instructor that you are interested in extra practice!

A wide variety of video tapes may also be available for library/learning center use or for use at home. The great thing about a video is that when you don’t understand something, you can stop it and rewind it until you understand it. If you get tired of watching it, you can turn it off. You may be able to find a good explanation of a particular topic by a different instructor or by the author of a different textbook that will be helpful to you.

As we have mentioned before, some resources will be extremely helpful, and others will not be helpful at all. It is important to locate as many resources *before you need help*, in order to have effective help available for you when you need it.

A number of computer applications and websites, **especially THIS one**, may be helpful.

Do You Remember?

1. True or False. After you enroll in a math class, you are on your own! Success in the class depends upon you alone.
2. List a few of the resources that may be available to help you succeed in math.
3. Are you usually better off to study alone or to study with friends in the class?
4. Multiple Choice. When is the best time to locate resources that may be available to you? A) immediately, even before you have trouble; B) the night before the first test; C) after you fail the first test; D) after you fail the course.
5. True or False. Never ask your instructor for help if he/she looks busy.
6. True or False. Never ask a relative for help in math.
7. How can you find a good tutor?
8. What can you do if you can't afford to hire a private tutor?
9. What qualities would you look for to determine which tutor is best for you?
10. What additional resources, besides people, may be helpful to you?