

+ Math Study Skills

A Guide to Success in Math

Student Workbook



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Overview

This program consists of seven topics all relating to study skills specific to mathematics. Each lesson is broken up into three parts; a short video, a student worksheet, and an in-class activity/discussion. You'll watch the video and fill in the worksheets on your own outside of class each week. Then, you and your classmates will come back to class with your completed worksheet and your instructor will lead you in an activity and discussion on that topic.

The goal of each lesson is to help you have a successful and enjoyable term in mathematics! Included on each worksheet are quotes from real students who have used these strategies to be successful in their own math classes. Follow in their footsteps, take their advice, and you too can find success this term in mathematics!

All videos can be found at : <http://www.youtube.com/user/mathstudyskills>

| Topic | Overview |
|---|--|
| How Learning Math is Different | This video explores four main things: myths about math, how math builds, math is not a spectator sport, and how college math is different than high school math. |
| Resources Available for Help | Explores the various resources available for students including student learning centers, instructor office hours, counseling and advising centers, et cetera. |
| Time Management | This lesson focuses on time management in relation to being a math student. How much time will be spent, and on what activities will that time be spent? Some time management strategies are introduced as well. |
| How to be an Effective Listener and How to Take Notes | Topics include how to be an active listener, how to organize your math notebook, and how to use your notes as a resource. |
| Homework | This lesson focuses on the importance of doing homework, and how to most effectively complete homework assignments. |
| How to Study for an Exam | Addresses strategies associated with preparing for an exam, as well as some basic exam taking strategies. |
| Overcoming Math and Test Anxiety | This video focuses on causes of math and test anxiety, symptoms, and tools for how to overcome it. |



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Math Study Skills

Student
Worksheet: How
Learning Math is
Different



"Success in math does not depend on how many answers you know, but what you do when you don't know the answer"

~Anonymous

Student Worksheet: How Learning Math is Different

Video: Go to <http://www.youtube.com/user/mathstudyskills> and watch the Math Study Skills – How Learning Math is Different Video

After watching the video whose link is above, please complete the following questions:

1. List the 5 most important things you learned from watching this video.

2. Think about a successful student. What are 3 things a successful math student does? How can you make sure you do these things?

Student Quotes:

"I can definitely say that if you do need to take several math courses do not take a term off once you've started. Learning math is like learning a new language, you have to keep your skills polished in order to keep things fresh."

"It is important, although attendance is optional, to attend every math class. You will miss so much material in just one class and although there are examples in the book, they are not always clear enough to teach yourself."

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Student
Worksheet:
Resources



*"Success is dependent
on effort."*

~Sophocles, Greek
Dramatist

Student Worksheet: Resources

Video: Go to <http://www.youtube.com/user/mathstudyskills> and watch the Math Study Skills – Resources Video

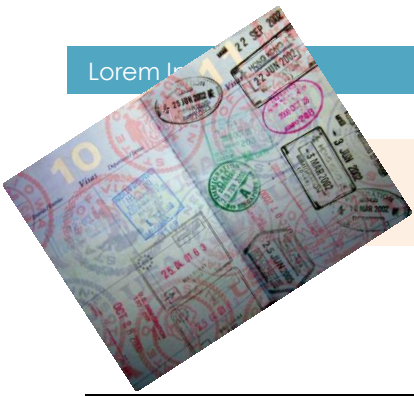
After watching the video whose link is above, please complete the following questions:

1. What are some new resources you learned about in the video that you didn't know about before?
2. Which of the resources in the video do you plan to use this term?
3. Go visit at least 5 of the resource places listed in this video and list one service the resource provides.
Have each center sign your "Passport to Resource" on the back of this worksheet to show you visited them.

Student Quotes:

"I feel like I am the biggest poster girl for the learning center. I wish I could live in there I love it so much...it is honestly a lifesaver. No one judges you and the tutors know how to explain the concepts really well. A lot of times I just sit and start my homework in there even if I don't need help its like a security blanket of knowing I'm surrounded by people who know how to do what I'm struggling with."

"Keeping a positive attitude is key to success, because if you feel that you can do it and your confident, usually you can do it."



Passport to Learning Resources

| Resource | Note One Service the Resource Provides | Signature of Resource Personel |
|-------------------------|---|---------------------------------------|
| Student Learning Center | | |
| Instuctor Office Hours | | |
| Counseling Center | | |
| Advising | | |
| Financial Aid | | |
| Women's Resource Center | | |
| Multicultural Center | | |
| Veteran's Center | | |
| Library | | |

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Student Worksheet: Time Management



"You will never 'find' time for anything. If you want time, you must make it."
~Charles Bruxto

Student Worksheet: Time Management

Video: Go to <http://www.youtube.com/user/mathstudyskills> and watch the Math Study Skills – Time Management Video

After watching the video whose link is above, please complete the following questions:

1. Name 5 things stated in the video that you would be spending time doing for your math class.
2. Fill out the "month-at-a-glance" calendar one month your class will be meeting. Be sure to include exam and quiz dates, all important due dates, any trips or vacations, important life dates (such as weddings, surf trips, et cetera), and any appointments you may have.
3. Fill in the "week-at-a-glance" calendar. Be sure to include all of your class meeting times, any instructor office hours which you can attend, any weekly commitments (such as work, sports, and personal time), study time for other classes, and your math study time (include when and where will you be studying math). Are you the student who will need to spend two hours outside of class per one hour spent in class, or the more common student who needs more time? Be honest with yourself.

Student Quotes:

"Plan to set aside time **everyday** at the beginning of the semester, not just time for class, but for homework. Having time everyday to complete the assignments is crucial for class success!"

"Time management is super duper important! Time management strategies aside, if you do not make school your priority, chances of completing your educational goals diminish."

MONTH-AT-A-GLANCE BLANK CALENDAR

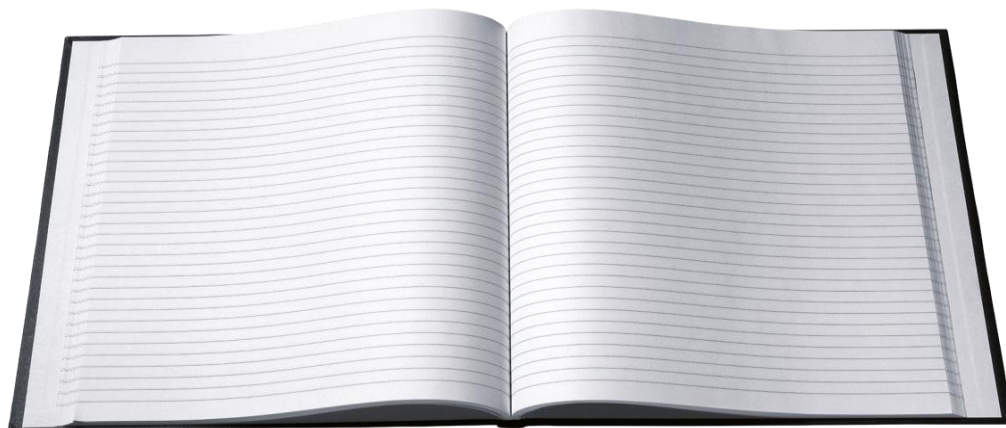
| MONTH _____ | | | | | | |
|-------------|--------|---------|-----------|----------|--------|----------|
| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Week-at-a-Glance

| | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|----------|--------|---------|-----------|----------|--------|----------|--------|
| 8:00 AM | | | | | | | |
| 9:00 AM | | | | | | | |
| 10:00 AM | | | | | | | |
| 11:00 AM | | | | | | | |
| 12:00 PM | | | | | | | |
| 1:00 PM | | | | | | | |
| 2:00 PM | | | | | | | |
| 3:00 PM | | | | | | | |
| 4:00 PM | | | | | | | |
| 5:00 PM | | | | | | | |
| 6:00 PM | | | | | | | |
| 7:00 PM | | | | | | | |
| 8:00 PM | | | | | | | |
| 9:00 PM | | | | | | | |

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Student Worksheet:
How to be an
Effective Listener
and Note-taker



"It doesn't matter if you try and try and try again, and fail. It does matter if you try and fail, and fail to try again."

-Charles F. Kettering,
American Scientist and
inventor

Student Worksheet: How to be an Effective Listener and Note-taker

Video: Go to <http://www.youtube.com/user/mathstudyskillss> and watch the Math Study Skills – Effective Listening and Note taking Video

After watching the video whose link is above, please complete the following questions:

1. What are three things from the video about listening you are going to try this term?

2. What are three things from the video about notetaking you are going to do this term?

Student Quotes:

"I always check my notes from class for the homework before answer in the back of the book, or the solutions manual, because I can see all the steps my instructor wants to see, and how they want my answer written."

"I sit on an aisle and/or toward the front to avoid distractions from outside of the classroom; this also makes it easier for the instructor see when I understand what I am doing, and when I need help."

"I continue to take notes even when I get lost, so that I have a specific answer when the instructor asks "What part are you confused on?" or "Where do you need help?" and then they don't just show me the same thing they did in front of the class."

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Student
Worksheet:
Homework



*"A person who never
made a mistake never
tried anything new."*

~Albert Einstein

Student Worksheet: Homework

Video: Go to <http://www.youtube.com/user/mathstudyskills> and watch the Math Study Skills – Homework Video

After watching the video whose link is above, please complete the following questions:

1. What are five things you learned from watching the video?

2. Has your approach and attitude changed towards homework after watching this video? If so how?

Student Quotes:

"Study tool for sure. HW is where I learn 95% of the material."

"I looked at homework as an extension of the class and lectures. I would not have been able to learn and understand the lessons without doing the homework daily."

"It took me a long time to complete homework. I realized doing similar problems over and over again helps to solidify the concept I need to learn. Sometimes I was annoyed with how long it took."

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Student Worksheet: How to Study for an Exam



*"Though no one can go back and make a brand new start, anyone can start from now and make a brand new ending."
~ Carl Bard*

Student Worksheet: How to Study for an Exam

Video: Go to <http://www.youtube.com/user/mathstudyskills> and watch the Math Study Skills – How to Study for an Exam Video

After watching the video whose link is above, please answer the following:

1. What are three things you learned, found interesting, or found intriguing from watching the video?

2. What are three things you learned from the video that you plan to do when studying for your next exam?

Student Quotes:

"Pay attention to in-class example and practice those. Work with other student in class and make practice exams. Review HW until you don't have to look in the book to do the problems."

"Know the material well before an exam is near. You know if you're unsure about something. Just ask for help. Don't ever give up, just ask for help. Ask, ask, ask until you understand!"

"I reread the lecture notes and did any class problems that were hard for me."

Recommendation and another great study tip!

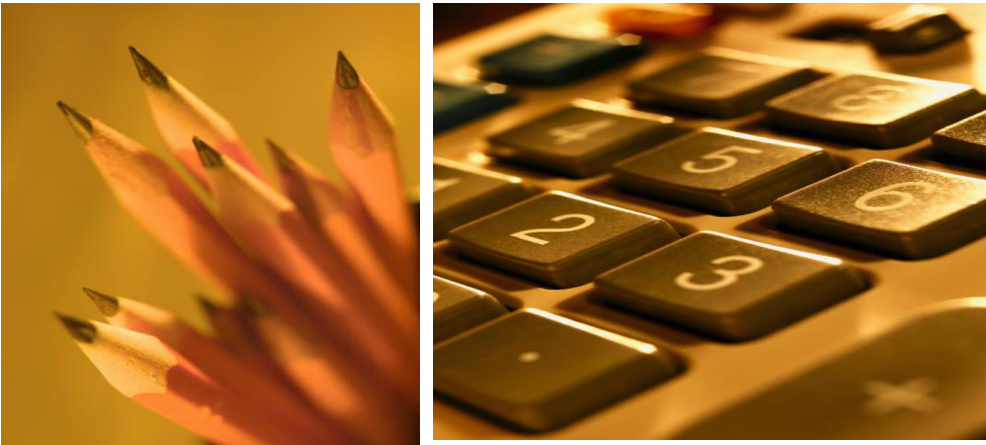
After you complete **each** homework assignment, go back and select the three or four most challenging problems from the homework set or lecture examples. These problems should represent “capstone” problems (i.e. problems that cover a majority of concepts from the section).

Copy these problems onto a blank sheet of paper. Make sure you note the page number and problem number so you can later find the solution to the problem. This collection of problems will serve as “mini self quizzes.” Two or three days later, put yourself in a test simulation (no notes, no textbook), and try the problems. It might be best to try them on a separate sheet of paper, so you can re-use your “quiz” again later, while preparing for the exam.

This should reveal your level of understanding from that homework set. If you could not do the problems, you need to go back and review. Practice, study, review your notes. Then, try the problems again two or three days later. If you do this every day, by the time it comes to review for your exam, you have created your own set of exam practice problems. Use them to practice for your exam!

Math Study Skills

Student Worksheet:
How to Overcome
Math and Test
Anxiety



"Where observation is concerned, chance favors only the prepared mind."

-Louis Pasteur, French
Microbiologist

Student Worksheet: How to Overcome Math and Test Anxiety

Video: Go to <http://www.youtube.com/user/mathstudyskills> and watch the Math Study Skills – Math and Test Anxiety Video

After watching the video whose link is above, please complete the following questions:

1. Have you ever experienced test anxiety? How did it feel, what happened?

2. List five strategies from the video that you can help overcome test anxiety.

Student Quotes:

"I realized that test scores are used to tell my instructor how well I understand what they taught, not how dumb I am, and that they shouldn't waste their time on me. This helped me take a bad test score as motivation to spend more time on the parts I did wrong, so that I don't make the same mistakes again next time."

"When my mind goes blank I just move on to another part, or look back at a problem I know, so I can get my confidence back before I look at the problem again."

"I do neck rolls (rolling your head around to reduce neck tension), and other stretches to help relieve stress during a test, but I have to be careful to make sure it doesn't look like I'm cheating."