

An aerial photograph of a large, intricate maze made of green hedges. In the center of the maze stands a wooden watchtower with a dark roof. The background shows a sunset over a forested area, with the sun low on the horizon, casting a warm, golden glow over the entire scene.

# Mastering Math Tests

**SECRETS AND STRATEGIES  
FOR ACING EVERY EXAM**

**DIANA BURLESON**

This is dedicated to you and to all of my students. You inspire me to keep learning.

It takes courage to learn more and want to do better in math, especially when you've struggled.

One of the best pieces of advice that I can share with you is to:

**Control what you CAN control and let go of what you can't.**

When it comes to math, you can think of it like this: You can't control the teacher you have or the kids in your class. You can't control the subject matter. You can't control what is on a test. But you can control your process, the way you show up to class and what you learn. Math is math and the fundamentals don't change. If you don't feel confident about any math content, there are hundreds of great teachers online and one or more of them will teach in a way that's perfect for you.

All the best to you! *Mrs. B.* 

In just a few minutes, I'll show you how you can make the most of every math test!

This guide contains concrete steps you can take to help you get more points on every math test.

In addition, I've included a **one page quick review** so you will always have this information right when you need it.

## **This puts more control in your hands.**

For a second, imagine sitting down to a math test without any anxiety for the first time in a long time and having the confidence of knowing that you did all that you could to prepare for this test. What difference would that make?

However, let's be real, knowing exactly what to do will NOT make you A's overnight, but you will have new tools that you can use right away. Is this new confidence worth it? Absolutely. And now you will see that continuing to master these skills will give you even better results.

Before I show you exactly how to build your confidence in test taking, let me clear out 4 false beliefs about math and math tests.

### **F**alse Belief #1: I Will Never Get Over My Math Anxiety\*

Your anxiety most likely comes from not doing well in math and on math tests in the past. Chances are you didn't have math anxiety in the first or second grade. This anxiety probably

developed early in your education when you were unable to understand the cause of the anxiety and therefore you were unable to fix the problem on your own.

**Here's the deal:** You can gain back your confidence. You were most likely very young when you began having math anxiety and your mindset is most likely stuck in that timeframe. Even though you are older, that anxiety has stayed with you. On top of that, your feelings about math have been reinforced by poor grades. But just because you have poor grades this does not mean that you haven't been learning. You've actually learned a great deal.

**The good news is that you *are* older and you *can*** better understand the cause of your anxiety. You can better understand that the anxiety you now have, is actually causing your grades to be less than what they could be. It's as if your anxiety is a self-fulfilling prophecy. Now that you will gain new tools to increase your scores, your scores will go up and your anxiety can begin to subside.

\* The anxiety that I'm talking about is an anxiety based solely because of math and your history with math. There are other forms of anxiety that are beyond the scope of this writing. There are specialists trained to help overcome anxiety. If you believe that your anxiety is not math related, please seek additional help.

## **F**alse Belief #2: I Can Just Retake All of My Tests

Sometimes we rely on test retakes to make sure that we get a passing grade. But relying on them every time we take a test can be detrimental in several ways.

Test retakes are good for ensuring that you don't fail a class. However, **the time it takes to do a retake is significant** and can take away opportunities to do better. Maybe you miss valuable class time reserved for homework. Maybe you retake your test during another class or before or after school. In addition, it takes time to study the same material over again.

**The time it takes to learn how to take a test more effectively is so much less than it takes to keep retaking tests.**

Once you learn these skills, you don't have to learn it again. Once you learn the best way to approach a math test, you will be able to get the most points possible and begin to improve your grade.

### **F**alse Belief #3: It Doesn't Make Sense to Spend More Time on Something I Hate

The time it takes to learn this skill is the time it takes to read this guide plus a few minutes of practice each day.

You will gain insight into taking tests that you most likely have not heard before.

**Here's the Deal: If you know that you'll pass every time you sit down to take a test, wouldn't that be worth the few minutes that it takes to learn this skill?**

## **F**alse Belief #4: I should be able to study the night before the test and pass

This is true for some types of tests. However, math relies on a foundation of information. If you have been struggling for a while in math, chances are that you don't have some of the basics mastered. To master multiplication and fractions especially, requires a deeper understanding - meaning that it's very difficult to absorb this information in one study session. Both multiplication and fractions require understanding on multiple levels.

The other piece is practice. Math problems can be approached in multiple ways and practicing allows you to find the best ways that work for YOU. For example, your teacher may show you two different ways to solve a problem. If you miss that class or your mind wanders when it's being explained, there is no way to know what you've missed without trying to solve these problems on your own. Only then can you realize that something may be missing.

**Each idea, no matter how large or small, will be seen and used again and again. That is why you can't leave math concepts unmastered - even something as apparently simple as multiplication.**

The good news is that you've learned a lot along the way and filling in the missing pieces won't take long. The time to fill in these pieces is greatly reduced if you hyper-focus on exactly what you need. For example, it's not important to practice  $2 \cdot 6$  or  $5 \cdot 8$  because you can figure each of these out simply by skip counting.

**[Personal Story** - I worked with a student that had been doing poorly in math for years. His parents told me at length about all of his struggles. He came to me for help and he was insecure about the way he approached problems. He 'saw' things a little differently than most. He took an approach that was a little more difficult than necessary. Other students told him that he was doing it wrong. However when I saw his work, I knew what he was doing was fine. I told him that as long as he obeyed the rules, his approach was fine. All he needed was reassurance that he was on the right track. I met with him only twice because he began making A's in class. He simply needed confirmation that what he was doing was correct.]

## **W**hy Should You Listen To Me?

I've worked with over 350 students that were in the same boat as you. They were in danger of not passing their standardized test and they struggled to pass math for years.

I didn't have much time to work with them so I had to figure out how to help them FAST.

**We spent just 5 minutes a week working on fundamentals** and a few minutes working on the best ways to approach a test, the clues to look for and most of all we talked about the **little things to change that make a big difference** when taking a test.

My students began having success and you can too.

**My goal is to make things as easy as possible, as fun as possible, and as quick to learn as possible.**

My students told me ‘Mrs. B., you make everything so easy to understand.’

As a result, my students began to do well in class. They began passing tests on their first try. They began to get excited about math and their class grades began to improve.

I know that this will help you, too. I know that you will see and discover things that you may have never thought about before.

Let’s Dive In ...

**S**tep 1 - If you have Test Anxiety, Figure Out What’s Causing It. If you deal with test anxiety, do this first. Picture yourself taking your test. How do you feel? Are you getting anxious just thinking about it? Now, write down all of things that you are anxious about. Here are a few things that may come to mind:

- I didn’t have enough time to study.
- I’m afraid I will do bad on my test.
- My heart starts racing when I walk in to take my test.
- My heart starts racing just thinking about taking the test.
- I’m embarrassed that I might fail.
- I freeze up and can’t even do the problems.
- I’m just bad at math.

What is it that you are thinking at this moment? Are these fears rational or irrational. The fears that are rational, such as ‘I didn’t have enough time to study’, can be dealt with. This guide will help you to take the necessary steps so that you won’t be unprepared in the future. As for the other things, such as ‘I’m

afraid I will do bad on my test', ask yourself "Have I done bad on a test before?" If the answer is yes, what did you do? Did you retake your test? What was the result of getting a poor grade? At a minimum, you survived it.

Write down each of your negative thoughts. Then go through each one of them and decide how to address each one. Let's go through the list above.

**I didn't have enough time to study.** This one is fixable. This guide will give you concrete steps that you can take to make sure that you are prepared for your next test.

**I'm afraid I will do bad on my test.** You can help alleviate this fear by being as prepared as possible. The better you do on your tests, the more this feeling will subside. It is perfectly natural to have this feeling even when you are prepared but doing just a few problems successfully will help you to gain more confidence as you work through the test.

**My heart starts to race as soon as I walk in the door to the test.** Figure out what helps you to calm down. One of the best things you can do is to be prepared but even being prepared might not stop your anxiety right away. You've most likely had this response to math tests for a long time and that's okay. Before your test, think about what makes you calm. Visualize whatever that is to help you calm down. Think of your 'happy place' - the beach, the library, the park, your room, being with your best friend, great music, etc.

Breathing techniques are simple yet highly effective as well. Try this: Breathe in for 4 counts, hold for 4 counts, breathe out for 4 counts, then hold for 4 counts. Repeat this 2-4 times. Practice this when you're calm. Practice this whenever you are studying

as well and see if it helps you to calm down. The reason this works is because you put all your focus into breathing. It helps you to take the focus away from the anxiety. This is useful not only before a test, but during a test as well. This is called BOX BREATHING. You can picture each of the 4 steps as each side of a square.

**My heart starts to race just thinking about taking the test.**

This is similar to actually taking the test. This is a great time to figure out how to relax since there is no 'real' pressure at the moment. Practice breathing. Maybe drawing helps? Thinking about the beach or sipping a cold glass of lemonade? Whatever that is for you, use it to help break the negative feelings around the test.

**I'm embarrassed that I might fail.** I know that you probably think that everyone around you is doing better than you. Maybe it's true, maybe it's not, but no matter what, you are not doing this for anyone else but you. You get a gold sticker for showing up, even though it's difficult ✨.

**I freeze up and can't even do the problems.** This is common to do even when you are fully prepared. That's okay. You can apply the same breathing technique or visualization of something calming, and that may be enough. You can also do small things such as write down everything you know about a problem. You can draw a picture, or even skip the problem and move on to something that is easier to solve. This guide will give you lots of tips and strategies that can help you with this.

One other suggestion that may help is to ask your teacher if you can **take your test in another room such as a testing room**. Removing yourself from the classroom might help.

**I'm just bad at math.** This is the #1 thing that I hear from people of all ages but it is not true. You are 100% capable. Your negative belief about your abilities in math have been reinforced by poor grades. What you are not told is that a few small things can change everything for you. If your struggles began in elementary school, then most likely you haven't mastered multiplication facts and this is a simple fix that I'll address in a few minutes.

One thing that you can do right now is to remove the phrase 'bad at math' and begin to say '**I'm getting better at math every day.**' Learning one thing from this ebook proves this is true for you today.

**Remember that the more you practice, the better you will be able to cope. Releasing fears will help you succeed.**

**S**tep 2 - Create a 'Do This First' Checklist. This is the time you get to take control of what your test day will look like by removing as many unknowns as possible. You get to gain control and lessen the anxiety that comes with not knowing what you will see.


Every test has these three things: A bunch of problems, A place for your name (and maybe a date), and Multiplication.

If seeing a test in front of you builds anxiety even though you have no idea yet what the problems are, then it's helpful to calm yourself as a first step.

These three steps will help you to manage your anxiety right away.

Grab a Sheet of Paper and as You Go Through This Guide, You can Create Your Own Review Sheet. (One is started for you at the end of this guide.)

Create a Checklist for what you will do first:

	Deep Breaths	
	Write Your Name	
	Create a Mini Matrix	

Now Let's Go Through the List

✓ **Breathing** will help you to calm your nerves and see everything more clearly. Have you ever finished a test and as soon as you leave the classroom, you remember how to solve a problem you couldn't solve just minutes ago? We all have. Taking a few deep breaths can help you see more clearly in the moment. Try this: Breathe in for 4 counts, hold for 4 counts, breathe out for 4 counts, then hold for 4 counts. Repeat this three times. Use this technique before you study as well. The more you practice controlling your anxiety, the quicker you will be able to calm yourself.

✓ **Write Your Name.** This may seem ridiculous, however knowing this alone can get you points on a test! Some teachers take points off if your name is not on a test so might as well do this first.

✓ **Create a Mini Multiplication Matrix.** Every equation contains multiplication so until you master your multiplication facts, you want to have these on hand. Spending just one minute on this can save you ten to fifteen minutes on your test! Also, using your Multiplication Matrix for homework and practice will help you learn your facts and it will feel effortless.

**When creating your Multiplication Matrix, you don't have to create the whole thing.** Especially if you have a test today or tomorrow, don't worry about doing it all. Just do the difficult facts: 6's, 7's, 8's and 9's. The reason for concentrating on these four fact families is that they are the most time consuming to solve. You already know most of the rest of the matrix. Eventually you can create more of the table when you get really fast at it and having all the facts at your fingertips is power. Here's how to do it: Write down the numbers 1 through 9, leaving space between each number. Underneath this write a 6 underneath the 1, a 12 underneath the 2, 18 underneath the 3, etc. What you are doing is skip counting the sixes. Then you will skip count the 7's, 8's and 9's. Now you have all of your difficult multiplication facts ready for immediate use.

It will look something like this:

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
6	12	18	24	30	36	42	48	54
7	14	21	28	35	42	49	56	63
8	16	24	32	40	48	56	64	72
9	18	27	36	45	54	63	72	81

Now when you need 6 times 7, check your matrix. Since  $6 \cdot 7 = 42$  and  $7 \cdot 6 = 42$ , then it doesn't matter which number you choose first. (This is the commutative property of multiplication and knowing this can help you solve problems a lot faster! Here's a simple example. If you have  $2 \cdot 7 \cdot 6$ ,  $2 \cdot 7 = 14$  and  $14 \cdot 6$  is ??? (This may be difficult to solve off the top of your head.) But if I use the commutative property, I can multiply  $7 \cdot 6$  first to get 42. Now you have  $42 \cdot 2$ . Doubling 42 yields 84. This is easier than multiplying  $14 \cdot 6$ .)

**S**tep 3 - Create a 'TEST' Checklist. I've created a checklist that you can customize for exactly the type of test your teacher gives (Multiple Choice or Long Answer). In the checklist below, items that are specifically for Multiple Choice tests are noted by (MC).

First, let's look at a couple of notes regarding the type of test you will be taking.

**Multiple Choice Test.** Multiple Choice tests usually have equal point values for each question. In addition, the answer is right there in the list of answer choices and you can use this to your advantage. The disadvantage is that partial credit is usually not given.

**Non-Multiple Choice Test.** If your test is not multiple choice, that usually means that you will get partial credit for getting close. This can be helpful and I'll show you tips on getting through these tests with the highest possible grade. If a teacher gives you this type of test, they want to understand how you approach a problem. They will be able to see where

you get it right and where you are going wrong. When they grade your test, they will usually include notes on your page about how to fix the problem. This is extremely valuable information that will help you determine exactly what they expect to see on future tests.

	Easy Problems First
	Read Answers (MC)
	Cross Out Wrong Answers (MC)
	Test/Check Answers (Both)
	Think Logically
	Solve it Another Way
	Write What You Know
	Answer Every Question
	Check Answers Again
	Look for Clues
	Check Your Signs
	Be Relatively Neat
	Don't Erase
	Don't Forget to Breathe
	Listen To Your Teacher

Test Day

## Now Let's Go Through the List

✓ **Do the Easiest Problems First** in order to get the most points possible, especially if you tend to run out of time on a test. This can also help you lessen your anxiety by boosting your confidence. You can start at the first question and work until you get to a difficult question. When you get to a difficult problem, circle the number of that question and

move on to the next problem. After you've gone through the test once, you will come back to the difficult problems. Here's why we do this. We can figure out exactly how much each question is worth (This may be different with non-multiple choice tests but the point value is often listed on each question). If there are 10 questions then we know that each question is worth 10 points. Knowing how much a question is worth is useful. **If all questions have equal value that means that the easier problems count just as much as the harder problems!** The logical conclusion is to do the easiest problems first. That way if you run out of time, you at least get the most points possible. One thing to be aware of is that if you are using a bubble sheet to record your answers, then you want to **make sure that the answer on your test matches the corresponding answer on the bubble sheet.**

✓ **Read the Answers (MC)** before trying to solve. This often helps you to see something that you missed in the question. You don't want to waste time working out a problem only to realize that a question asks you to do something totally different than what you were thinking. Reading the answers helps you to quickly see what you need to do.

✓ **Cross Out Wrong Answers (MC).** Look for patterns in the answer choices. Sometimes three out of four of the answers look very similar. That is often a clue that the answer is there in that group. Think about this from the point of view of the teacher that makes the test. Only one answer is correct so they have to make up answers that are close to the actual answer to make sure that you know what you are doing. This might mean that you can cross out the fourth option but be careful to only mark it out if you *know* that it is not the answer.

If you have a question that asks something like 'How many marbles are left over' then you know that the answer will never be less than zero. In this case you can mark out any answers that are negative.

If you have a question that asks 'How many books did she read last week?', and the answers are 2, 4, 9, and 1000. The answer is probably not 1000.

Very often you will be able to eliminate two answers.

Start looking at the questions where you **know** the answer. See if there is a pattern to the incorrect answers. This will help you to see clues that you can use for future tests.

Note: Your teacher will give you tests that are similar from test to test so see if you can spot patterns. This will help you when studying for your next test. For example, your teacher may always take questions directly from your notes. Asking your teacher how to best study for the test may provide additional clues that will help you know just where to go.

✓ **Test/Check the Answers (Both)**. If you don't know exactly how to work a problem, often you can plug in each of the answer choices (MC) into the original problem to see which one is correct. Also, after you solve a problem, you can plug the answer back in to the original problem and make sure that it makes sense.

This is not possible on every question however you can use reason to see if your answer makes sense.

**[Personal Story** - I had a friend that was prepping for their GED (High School Equivalency) test. They were worried most about the math portion since they'd never done well at math. They came to me on the night before the test so I knew that I couldn't help them study however I did have a tip for them. Since I knew that this would be a multiple choice test, I told them this one thing: The answers are on the test. If you don't know how to figure it out, then just plug all the answers into the original problem and see which one works. They finished their test and within minutes it was graded and you know what? Not only did they pass but they were told that they made the highest grade of anyone there that day! My friend came back to me excited and said that knowing that they could plug in the answers and test them was exactly what they needed to ace the test.]

✓ **Think Logically/Question Your Answer.** If the question asks you 'About how many apples are in a bowl?' The answer will not be four and a half. There won't be a half of an apple in a bowl. So if you get a fraction where there should not be one, check again. Maybe they want you to round down to the nearest whole number even though they don't come right out and say it. The answer also won't be negative since you can't have a negative number of apples in the bowl.

**For each question, ask yourself: Does this answer make sense?**

✓ **Solve it another way.** Sometimes we get stumped on a problem and we're not sure what to do. We think we need to solve a problem in a very specific way but as long as we follow

the rules of math, we might be able to approach the problem differently. For example if you have a question like this: A marathoner travels about 1 mile every 8 minutes. The formula for determining how far a marathoner has traveled in  $x$  minutes is  $y=x/8$ . Then you are given the question: How far do they travel in 30 minutes? Maybe if you have trouble with fractions or with formulas, you could use another method. You could simply begin counting up by 8 minute increments. You can also figure out how far they go in 4 minutes and in 2 minutes. With this information, you can solve the problem easily. In this example, you could make a list 8 min = 1 mile, 16 min = 2 miles, 24 min = 3 miles, 32 min = 4 miles. Now you know that they run less than 4 miles because the question asks how far they go in 30 minutes. This information alone might be enough to answer the question. If not, you can further break down the problem. This information also might be enough for you to be confident in using the formula.

The bottom line is that there are other ways to get to an answer so just start trying things and then give it your best guess.

Sometimes teachers like to throw in a challenging problem and this method will help you to think about alternate solutions.

**✓ For most problems, but especially the tougher problems, always write down what you know.** For example if the problem is describing a situation, draw it out and label all the pieces that you can. If there is already a drawing, then write down any observations that you see in relation to the drawing (such as length or width or radius or diameter). If you don't know how to do a problem this will do two things: 1) It will help you get extra points and 2) It will very

often help you to see the next step. Each step is potentially more points.

If you are allowed notes or a Formula Sheet, then you can use these to find information that fits the problem that you're working on. For example if you are given the radius of an object, you can find which formula contains only the radius.

✓ **Answer every question.** Whether it's multiple choice or long answer, make your best guess. It won't hurt your grade and you might just guess correctly.

✓ **Go back and check answers** if you have time. When doing this, try looking at the question as if seeing it for the first time. You might see it in a different way or maybe you gained clues by going through the test. Don't change an answer unless you absolutely know you did something wrong. Don't worry that others have already turned in their tests. This time is yours.

**[Personal Story** - I was often the last person to finish my test. I would go through it usually 2 times and I often found small mistakes that I made. I only corrected answers that I knew were wrong. Don't be afraid to take all the time available to take your test. The time is for you to use.]

✓ **Look for Clues** throughout the Test. The answers to some questions are actually inside of the test. This is common with questions involving vocabulary. For example a question may begin with 'Below is a list of Rational Numbers ...'. There may be another question that asks you to circle all of the Rational Numbers. The first question can help you solve the

second question if you are shaky in your understanding of Rational Numbers.

✓ **Check Your Signs.** This is a place where you can easily gain points! If there are negative signs in any problem, your teacher is checking to see if you know how to deal with them. Do you know that multiplying two negatives gives you a positive? Or that multiplying an odd number of negatives yields a negative number? Do you know that  $-4 - 5 = -9$ ? If you struggle with these, write them down on your review sheet and practice them. Using a number line can help you visualize the answer and give you the confidence that you've worked a problem correctly.

✓ **Be relatively neat.** Keep your numbers lined up when adding, subtracting, multiplying, dividing, etc. Also when using formulas, line up each step. That way when you go back to check your answers you already have a 'map' to guide you. You won't have to redo work unnecessarily and your teacher will be able to follow your thought process.


✓ **Don't erase.** Erasing takes time and you lose your roadmap to how you approached a problem. Don't worry if you think that what you wrote is silly or wrong. These notes can help a teacher to help you. These notes can also help you later when you review the question again. You will see what you have already tried. If you feel the need to erase, draw a single line through it instead. This saves time and keeps your roadmap.

✓ **Don't forget to breathe.** This might take some practice but once you realize you're stuck, that's the time to refocus and take a few deep breaths.

**S**tep 4 - **A Few Days Before the Test.** When you start to think about your test a week or two before it happens, you can spend as little as 5 minutes a day getting prepared. When you do this, it helps you to understand where your strengths and weaknesses are. Figuring this out early gives you time to tackle the problem and get some help in plenty of time to master a subject.

These are **little things you can do daily** so that you can **get the most out of your class time.** Outside of class time, most of this will take **only a few minutes a day.**

	Listen To Your Teacher
	Create Test Notes
	Add New Information
	Create a Practice Test
	Use Your Practice Test
	Vocabulary Flash Cards
	Cheat Sheet
	Practice Mult. Grid
	Practice Your Breathing



## Now Let's Go Through the List

✓ **Listen to your teacher.** Your teacher will give you clues, especially starting a few days before a test. Your teacher may have already made up the test or has at least started creating it. **They are doing just what you are doing.** They are going back through all of the material and finding problems that they think will best challenge your knowledge about a subject. Think about this: If they want to test your knowledge on how to find the area of a rectangle, they may not come right out and ask for it. They may talk about a rectangular garden plot. They are also not going to give you simple dimensions such as a one foot by two foot garden. They will give you a 6 by 8 or 16X25. They are looking for your understanding on many levels.

Also, if your teacher gives you a review sheet or says things like: 'Make sure you look over the last unit', 'Watch out for those negative signs', or any other thing that is a little different than what they say day to day, make a note of it.

**[Personal Story** - I once had a teacher that said "I'm working on the questions for the upcoming test in my office. I'm headed down there right after class if anyone would like to come take a look." As soon as class was over, I headed straight to his office along with many of my classmates. The surprising thing to me was that only about half the class showed up. I didn't care what my plans were after class, I made new plans to get as much information about the test as possible. The questions on the test the next day were exactly the ones he'd

shared with us. I aced the test. The moral of this story? If your teacher gives you clues and hints, take them to heart. This can make a huge difference in your grade.]

✓ **Begin creating your test notes.** For example if the test will cover distributive property, then you can find one or two examples that the teacher gives in class each day. You can write out these questions and work them out that night. If you have any questions at all, you can ask your teacher for clarification the next day.

✓ **Each day add any new information including vocabulary.** Formulas and Vocabulary can be added each day so that you always have everything that you need in one place. Capture all that you can. Sometimes when the teacher shows an example, it looks really simple to do, but often when you try to do the problem yourself, you can't remember exactly what they did. **So write down what you can, try doing it yourself and note where you get stuck. Ask your teacher the next day for further understanding.** This day by day approach will save you loads of time when you're studying for your test. You will have most of your questions answered as they come up and you will be able to learn any new material much more quickly because you've been keeping up with the teacher.

✓ **Create a Practice Test.** As your teacher gives you examples, use these exact same examples to make up your test. Create the questions and rewrite the same questions with different numbers. Figure out the answers and keep them handy.

If you want to go a step further, show this to your teacher and ask them if you're on the right track. Ask them if there is anything that you can add to help you prepare better.

✓ **Use Your Practice Test.** Practice this as much as possible. Practice as if you've never seen the problems. Practice like you are actually taking the test. Set a timer, get your notes together, remove distractions and make your environment as close to the actual test as possible. This simple method will help to relieve anxiety as well as help you master the subject. Practicing problems that were introduced recently can help you solidify the material in your brain. Also, it can help you see where you may still be having problems. In this case, you have time to ask your teacher for further explanation the next day.

✓ **Create Flash Cards for Vocabulary Words.** This can be very simple. You can grab index cards or on a piece of paper, simply write the vocabulary words on one side and the explanation on the other. Drawing pics can enhance your ability to remember as well. Practice these as needed. These are easy points to gain on a test.

✓ **Begin Creating Your Cheat Sheet.** Even if you are not allowed to use notes, create your own study sheet. **Just the act of doing this will help you commit what you write to memory.**

Include any formula that is used in class. In addition to writing out a formula, write out the name of the formula and what's it's used for. For example  $y=mx+b$ . You would title this the 'Slope-

Intercept Form of a Line' and you would note that  $m$  = slope and that  $b$  = the  $y$ -intercept. When you come across a problem that mentions the  $y$ -intercept or the slope of a line, this can alert you that you might be able to use the slope-Intercept Formula to solve that problem.

Include Vocabulary in your notes as well.

Try to keep your notes on one page so that you aren't spending a lot of time trying to find notes during your test. Also making one of these for each test will provide a great way to study for your final test of the year.

✓ **Practice Creating Your Multiplication Grid.** If you haven't memorized your multiplication facts from 1 to 100, you will save time by recreating this on your next test. What I mean by this is to find a blank space on your test and actually write the matrix out. To save even more time, practice creating this for 5 minutes a day until you can create this in two minutes or less. The time it takes to recreate this on your test will be saved with each problem you work. Use this grid for homework and practice. **Added Bonus: Using it will help you to connect the facts with the answers, therefore committing these facts to memory!**

This is for when you can't use notes on your test. If you can use notes, make sure that you include the multiplication matrix in your notes if you have not committed them to memory yet.

✓ **Practice Your Breathing.** This has been mentioned, but it's worth repeating. Get in the habit of calming yourself before the test. Practice at home. Breathe in for 4 counts, hold for 4 counts, breathe out for 4 counts, then hold for 4 counts.

You may only need to do this once or twice. Practicing at home before you study will help you to focus and is a good reminder to do this every time you're working on math.

**STEP 5 - Other Things to Consider.** Here are some additional thoughts and pitfalls about this approach. I'm here to guide you through the pitfalls.

**Don't Think that You Can Glance at Your Notes and Do Well.** Working the problems is the key for your brain making the connection to the information. It's easy to simply say 'I got this' when something is written very clearly and concisely, however it is a different thing when you actually have to work the problem on your own. You may understand steps 1 and 3 but that 2nd step gets confusing. If it confuses you now, it can really throw you off when you get to the test. If you know how to do every problem in detail, the less you will get thrown off by problems presented in a different way.

When you see an amazing tennis player or guitarist or artist, they make what they do look simple and effortless. That's because it becomes second nature but every master reviews the basics daily.

Here's the thing, practicing actually saves time. Just a little bit of effort working out problems will help you save time now and in the future.

**Don't Shortcut Multiplication.** Multiplication is *the* key foundational piece. If these facts are not mastered, keep working on them. If you don't know them at this moment and

you have a test coming up, practice making a multiplication matrix. Do this over and over until you can do it very quickly. The process of doing this will also help you learn.

**Don't Think That Calculators Will Fix The Problem.** Practice as much as you can without calculators to really understand a problem. **One thing you will find is that you can solve many problems faster without a calculator.** Use the calculator for verification and to check your answers.

**Create a New Review Page for Each Test.** Writing down this information helps it to stick in your brain. You can start with a basic page that has information that you will include on every Review Page. **Keep this with you in class** and make quick notes to be rewritten later. It is really helpful to rewrite your notes. You will realize what you know and what you might have missed. You can pick up the details you missed the next day in class. Remember to keep these so that you can use them for reviewing for your final exam.

**Don't wait until the day before the test to study.** Spending even 5 to 15 minutes a day can help you be more relaxed the night before a test. Figure out how to make this a habit. Set your timer for 5 to 15 minutes each evening and work as fast as you can creating your notes and practicing the work you did in class today.

**Your Teacher Wants You to Do Well.** This may not seem like it's true at times. We all have had teachers that we don't connect with. However one thing that I know is that your teacher wants to know that you care about the subject (at a

minimum). If you do well, then they know that they have done a good job teaching you the information.

**[Personal Story** - I was writing a paper for English. The teacher gave us several opportunities along the way to make some points toward our grade. Somehow I missed one of these and got a zero on one part. I asked my teacher if she could help me out, but she refused. I was pretty upset and I told my dad about it. Without my knowledge, my dad went to the school and spoke with my teacher. My dad did not yell or make a scene, he simply let the teacher know that I cared. A few weeks later I turned in my final paper and she'd given me a better grade than I deserved. She pulled me aside and let me know that the paper was not worth the grade she put on it, (I don't remember what she said after that) but the gist was that she understood that I cared and threw me a bone. The moral of this story is that my teacher cared that I cared. Sometimes we suffer in silence but know that your teacher wants you to do well. They want to know that you care. Even if your relationship is not good right now with your teacher, showing that you care can help to turn this around. I could have avoided the situation all together by keeping up with a daily routine of checking my notes.]

**When you have Accommodations, take advantage of those.** For example, when you take a test and you are allowed to have questions read to you, then make sure that you make use of this accommodation. When possible, practice the same way that you will be taking your tests. If someone can read practice problems to you, then this will help you be better prepared. These accommodations are there for you.

Even if you haven't done well in math class for a while, you can still let your teacher know that you care. You can do this by being respectful in class, asking them for help when you need it, and being prepared every day (meaning make sure you have a pencil, paper, homework, etc.) All of these little things make a big difference.

**Sometimes Things Happen - Don't Beat Yourself Up.** It does not matter if your review page is perfect. It's fine if you were unable to make one for this next test. What you have done to this point is extremely helpful. You are building your foundation. **You do not lose ground just because you didn't create a review page this time.** Every piece that you learn is yours forever. **You will never lose what you have learned** and the more you learn, the farther you can go.

### Let's Recap

1. If you have test anxiety, figure out what's causing it
2. Create a **'Do This First'** Test Day Checklist
3. Create a **'Test'** Checklist
4. Create a List of what to do **'Days Before the Test'**
5. **Do** the things on your Checklist
6. Avoid Pitfalls that can keep you from Success

Use this guide any way that you want. I'm sure there are things in here that you already do well. There are also things that you may have never thought about. Pick out what works best for you. Find a time and a place to practice that feels good to you. Maybe you like to get things out of the way and do it right after school? Everyone is different and it will help you

tremendously to figure out what works best for you. Music, quiet, noisy, etc. Maybe you would enjoy journaling your math, or make your study guide into a piece of art. No one is going to judge your method. They might enjoy your creativity though.

**[Personal Story** - I used to work on math in front of the tv. For some reason it worked for me. I tried studying in a quiet library but that distracted me more than helped me. I like a bit of noise going on when I'm working.

One of the people that I tutored used to always study at night. Later he realized that for him, studying in the morning was much more effective. Once they begin studying in the morning, they got a lot more done and their grades began to go up.]

**Small changes can make a BIG difference in your grade AND in the TIME you spend on math.**

Below is a 'Cheat Sheet/Study Notes' to get you started. You can print this out and add your own formulas and notes in the blank spaces. Use this sheet for tests if it is allowed. Also, use it for any homework and in-class work. Practicing with it will help you to know where all of the information can be found but also, it will help you to know what else you need to add.

	Deep Breaths
	Write Your Name
	Create a Mini Matrix
	Easy Problems First
	Read Answers First (MC)
	Test and Check Answers
	Think Logically
	Solve it Another Way
	Write What You Know
	Answer Every Question
	Check Answers
	Look for Clues
	Check Your Signs
	Be Relatively Neat
	Don't Erase
	Don't Forget to Breathe
	Listen To Your Teacher
	Create Test Notes
	Add New Information
	Create a Practice Test
	Use Your Practice Test
	Vocabulary Flash Cards
	Cheat Sheet
	Practice Mult. Grid
	Practice Your Breathing

Test Day

Test Day

DAILY / WEEKLY

	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100