Prepare Physically

Most tests ask you to work at your best under pressure, so try to get a good night’s sleep before the exam. Sleep improves your ability to remember what you studied before you went to bed.

Eating a light, well-balanced meal that is high in protein (eggs, milk, yogurt, meat, fish, nuts, or peanut butter) will keep you full longer than carbohydrates (breads, candy, or pastries). When time is short, don’t skip breakfast—grab a quick meal such as a few tablespoons of peanut butter, a banana, or a high-protein granola bar.

How Can You Work Through Test Anxiety?

Some students experience incapacitating stress, known as test anxiety, before and during exams, especially midterms and finals. Test anxiety can cause sweating, nausea, dizziness, headaches, and fatigue. It can reduce your ability to concentrate, make you feel overwhelmed, and cause you to “blank out” during the exam. As a result, test anxiety often results in lower grades that do not reflect what you really know. The following strategies, which tap your emotional intelligence, will help you control reactions that may get in the way of your performance.

Prepare and Have a Positive Attitude

Being on top of your work from the beginning of the term is the greatest stress reliever. Similarly, creating and following a detailed study plan will build knowledge and a sense of control, as will finding out what to expect on the exam. The following strategies will help you build a positive attitude:

- **See tests as opportunities to learn.** Instead of thinking of tests as contests that you either “win” or “lose,” think of them as signposts along the way to mastering material.

- **Understand that tests measure performance, not personal value.** Grades don’t reflect your ability to succeed or your self-worth. Whether you get an A or an F, you are the same person.

- **Believe that instructors are on your side.** Your instructors want you to do well, even when they give challenging tests—so contact them if you need help.

- **Seek study partners who challenge you.** Find study partners who inspire you to do your best. Try to avoid people who are also anxious because you may pick up their fears and negativity. (See chapter 1 for more on study groups.)
• **Get tutored.** Many schools offer tutoring help at no charge. Find out what’s available and then sign up for sessions.

• **Practice relaxation.** When you feel test anxiety mounting, breathe deeply and slowly, close your eyes, and visualize positive mental images such as getting a good grade. Try to ease muscle tension—stretch your neck, tighten and then release your muscles.

• **Shut out negative vibrations.** If you arrive at the testing room early for a last-minute review, pick a seat far away from others who are nervously discussing the test.

• **Practice positive self-talk.** Tell yourself that you can do well and that it is normal to feel anxious, particularly before an important exam.

• **Remind yourself of your goals.** Connecting the test to your long-term goals will help you calm down as you focus on what’s important.

Math exams are a special problem for many students. Dealing with the anxieties associated with these exams will be examined in the *Get Focused!* end-of-part section on pages 295–298 where you will find stress-management, studying, and exam-taking techniques.

Finally, a good attitude involves expecting different test-taking challenges from those you experienced in high school. College exams may ask you to critically analyze and apply material in ways that you never did before. For example, your history instructor may ask you to place a primary source in its historical context. Prepare for these challenges as you study by continually asking critical-thinking questions.

**Slay the Math Anxiety Dragon**

A special form of test anxiety, math anxiety is based on common misconceptions about math, such as the notion that people are born with or without an ability to think quantitatively or that men are better at math than women. Students who feel they can’t do math may give up without asking for help. On exams, they may experience a range of physical symptoms—including sweating, nausea, dizziness, headaches, and fatigue—that reduce their ability to concentrate and leave them feeling defeated.

The material in this segment is designed to help you deal with the kind of math-related anxiety that affects your grades on exams. As you learn concrete ways to calm your nerves and special techniques for math tests, you will feel more confident in your ability to succeed.

These test-taking tips supplement what you learned in chapter 7, “Test Taking: Showing What You Know,” where you studied test taking in depth and generalized test anxiety. That chapter also includes valuable information on test preparation, general test-taking strategies, strategies for handling different types of test questions, and learning from test mistakes.

**Gauge Your Level of Math Anxiety**

Use the accompanying questionnaire to get an idea of your math anxiety level.
Rate each of the following statements on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree).

1. _____ I cringe when I have to go to math class.
2. _____ I am uneasy about going to the board in a math class.
3. _____ I am afraid to ask questions in math class.
4. _____ I am always worried about being called on in math class.
5. _____ I understand math now, but I worry that it's going to get really difficult soon.
6. _____ I tend to zone out in math class.
7. _____ I fear math tests more than any other kind.
8. _____ I don't know how to study for math tests.
9. _____ It's clear to me in math class, but when I go home it's like I was never there.
10. _____ I'm afraid I won't be able to keep up with the rest of the class.

SCORING KEY:

40–50 Sure thing, you have math anxiety.
30–39 No doubt! You're still fearful about math.
20–29 On the fence.
10–19 Wow! Loose as a goose!


The best way to overcome math test anxiety is through practice. Keeping up with your homework, attending class, preparing well for tests, and doing extra problems will help you learn the material and boost your confidence.

Following are 10 additional ways to reduce math anxiety and do well on tests:

Ten Ways to Reduce Math Anxiety

1. Overcome your negative self-image about math by remembering that even Albert Einstein wasn't perfect.
2. Ask questions of your teachers and your friends, and seek outside assistance.
3. Math is a foreign language—practice it often.
4. Don't study mathematics by trying to memorize information and formulas.
5. READ your math textbook.
6. Study math according to your personal learning style.
7. Get help the same day you don't understand something.
8. Be relaxed and comfortable while studying math.
9. "TALK" mathematics. Discuss it with people in your class. Form a study group.
10. Develop a sense of responsibility for your own successes and failures.

Use Special Techniques for Math Tests

Use the general test-taking strategies presented in chapter 7 as well as the following techniques to achieve better results on math exams:

- **Read through the exam first.** When you first get an exam, read through every problem quickly and make notes on how you might attempt to solve the problems.

- **Analyze problems carefully.** Categorize problems according to type. Take the “givens” into account, and write down any formulas, theorems, or definitions that apply before you begin. Focus on what you want to find or prove.

- **Estimate before you begin, to come up with a “ballpark” solution.** Work the problem and check the solution against your estimate. The two answers should be close. If they’re not, recheck your calculations. You may have made a calculation error.

- **Break the calculation into the smallest possible pieces.** Go step-by-step and don’t move on to the next step until you are clear about what you’ve done so far.

- **Recall how you solved similar problems.** Past experience can provide valuable clues.

- **Draw a picture to help you see the problem.** Visual images such as a diagram, chart, probability tree, or geometric figure may help clarify your thinking.

- **Be neat.** Sloppy numbers can mean the difference between a right and a wrong answer. A 4 that looks like a 9 will be marked wrong.

- **Use the opposite operation to check your work.** Work backward from your answer to see if you are right.

- **Look back at the question to be sure you did everything.** Did you answer every part of the question? Did you show all required work?