



Convert Math Anxiety into Math Achievement

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The Truths:

- Math Anxiety is real.
- Math Anxiety is contagious.
- People use the myths about math anxiety as excuses not to seek answers.
- Math Anxiety can be prevented and overcome.

The Myths:

- You have to be good at calculating to be good in math.
- Math requires logic, not creativity.
- Mathematical thinking is easier for boys and men than for girls and women.
- The only thing important in math is getting the right answer.
- You either have the 'math gene' or you don't.

6 practical ways to prevent or 'treat' math anxiety:

1. Avoid negatives.
2. Recognize that studying math is different than most other disciplines.
3. Recognize that effort makes a difference.
4. Take an offensive approach to testing.
5. Turn math anxiety into math achievement.
6. Make math part of students' daily routine outside of 'math class.'

Activities which reinforce a positive attitude toward math include:

- measuring in home improvement and cooking projects
- estimating just about everything
- approximating grocery store totals
- calculating tips, phone rates and interest rates
- exploring number relationships and patterns while casually "talking math"
- highlighting what types of math are needed in specific careers

Tips for setting the right tone and turning anxiety into achievement (Some tips are for teachers and some more for parents.):

- Help students overcome math anxiety by playing puzzles with numbers and doing other math games.
- Make math interesting, like figuring out how many pies are needed for Thanksgiving dinner.
- If there are math problems that students don't know how to do, then teach them correctly.
- Don't give students with math anxiety more and more and more practice to the point that they get over stressed.
- Be patient with math-anxious students.

- Don't compare how they do with other students.
- Demonstrate to students a positive attitude toward math.
- Plan short, daily math sessions away from noise and distractions.
- Schedule frequent breaks.
- Use genuine praise and infuse humor into sessions when appropriate.
- Review previously learned math concepts before each new homework assignment.
- Start each session with math concepts that are familiar and gradually move into new and therefore more difficult areas.
- Learn the language of math together and use it frequently.
- Encourage the student to be the "teacher" whenever possible by explaining the problem to you.
- Read each word problem aloud together; stop often to assess what you have read and break the problem into manageable parts.
- Use hands-on objects from around the house or classroom to introduce new math concepts.
- Help students focus on the reasons behind the procedures rather than relying on memorization alone.
- Take turns working on problems and explaining how you arrived at your solutions.
- Model the process of looking up unfamiliar information and following examples in the textbook.
- Search for ways to make math interesting and relevant; use hobbies and special interests as springboards for learning.
- Work together to write and solve math "word problems" that illustrate family or class members participating in real-life activities.
- Solve each problem in a variety of ways and allow the student to use his or her favorite method.
- Encourage students to skip difficult problems temporarily and return to them later.
- Model the process of making mistakes and calmly learning from them.
- Encourage students to keep a math journal and make daily entries of math notes, examples, vocabulary words, symbols, strategies, and feelings about math.
- Look for things that relax your students and think of ways to apply these techniques to math assignments and tests.
- Involve your students in real-life decisions involving numbers and logical reasoning.
- Show the "fun side" of math through the use of number riddles and games.
- Create a math "buddy system" for all family or class members, pairing anyone who is "math-anxious" with the most patient members.
- Be upbeat and positive about math in words, voice tones, and telltale body language.
- Display good work in the classroom or on the refrigerator.
- Strengthen your own math skills through refresher courses, distance-learning programs or self-help sessions.
- Dispel the notion that math is difficult and irrelevant by "talking math" to your child/students as you use math in everyday activities.

"The Universe is a grand book which cannot be read until one first learns to comprehend the language and become familiar with the characters in which it is composed. It is written in the language of mathematics."

— Galileo