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What's what PSPN

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UNDERSTANDING AND OVERCOMING MATH ANXIETY: STRATEGIES FOR ACADEMIC SUCCESS !

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UNDERSTANDING AND OVERCOMING MATH ANXIETY: STRATEGIES FOR ACADEMIC SUCCESS

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WHAT IS MATH ANXIETY?

Mathematics is widely recognized for its rigorous and challenging nature. Mathematical problem-solving can be particularly daunting for some individuals, often due to a phenomenon known as math anxiety. Math anxiety is a state of unease and concern that hampers one's ability to excel in mathematics, manipulate numbers, and solve mathematical problems in everyday and academic contexts [1]. It is a prevalent experience, causing individuals to feel worried or panicked when confronted with math problems, ultimately hindering their cognitive processes. This heightened emotional response creates a cycle of low confidence and anxiety, forming a barrier that adversely affects school or work performance. Exploring the enigmatic domain of math anxiety uncovers a range of symptoms similar to those observed in different forms of anxiety. Imagine a scenario in which people who struggle with math anxiety experience a range of emotions, including stiff muscles, an elevated heart rate, sweaty palms, and even dizziness. Anxiety extends beyond the physical realm, entering cognitive processes and adding complexity to basic tasks, such as calculating an equation.

Scientists hypothesize that anxiety's interference with working memory and the brain's capacity for multitasking may be the cause. Imagine attempting to retain multiple numbers and problem-solving procedures in your mind simultaneously while anxiety surreptitiously diminishes this cognitive capacity, resulting in a bewildering sensation of the mind abruptly becoming empty. Understanding the implications and manifestations of math anxiety reveals its significant impact on individuals' academic and professional lives.

In addition to these physiological manifestations, math anxiety becomes evident through other distinctive indicators. A common symptom of math anxiety is reduced self-assurance, as individuals often perceive themselves as incapable of mathematics, leading to a diminished interest in the subject. This lack of self-assurance is a recurring pattern when individuals resort to avoidance to cope. By avoiding circumstances that require mathematical abilities, they limit their chances of strengthening such skills. The academic realm provides evidence of the consequences of arithmetic anxiety, especially in the younger population of children and adolescents. Experiencing difficulties in math-related classes, including science and technology disciplines, becomes a defining characteristic of this anxiety, reflecting its widespread influence on academic pursuits. Grades suffer, serving as a clear indication of the difficulties experienced by individuals struggling with math fear. This narrative extends beyond the confines of the classroom and persists into adulthood, where math anxiety can introduce uncertainty regarding one's decision to pursue careers in the science, technology, engineering, and mathematics sectors.

Moreover, the long-lasting impact of math anxiety extends into adulthood, influencing individuals' career choices in STEM fields. The correlation between math anxiety and a decline in interest or achievement in diverse domains exemplifies the profound influence of this intriguing psychological phenomenon.

Have you ever wondered if you experience math anxiety? Take our self-test to find out!

This self-assessment, sourced from [3], allows you to rate your answers on a scale from 1 to 5. Add up your scores and discover your results below.

Could you check your score?

40-50: Sure, you have math anxiety.

- 30-39: No doubt! The thought of doing math still makes you uneasy.
- 20-29: Perhaps!
- 10-19: Wow! Possibly a math major in the making!

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

Adopt a comprehensive strategy to overcome math anxiety and elevate your learning experience:

- 1. Cultivate resilience by replacing negative self-talk with positive affirmations.
- 2. Actively participate in your learning journey by posing questions to deepen understanding and clarify concepts.
- 3. Treat mathematics as a language, recognizing the need for consistent practice to enhance proficiency.
- 4. Transition from memorization to a deeper understanding of mathematical concepts' foundational principles.

5. You should dive into your mathematics textbooks, absorbing crucial details and applying effective problem-solving techniques for comprehensive understanding.

6.Tailor your study approach to match your individual learning style, creating a conducive atmosphere for best comprehension and long-term retention.

7.Confront obstacles head-on; please ask for help quickly, and don't hesitate to reach out on the same day you encounter challenges.

8. Foster a serene and friendly environment during mathematical study sessions to boost concentration and alleviate anxiety.

9. Enhance your understanding of mathematical concepts by incorporating verbalization into your learning process.

10.Embrace accountability for your academic journey, recognizing that achievements and setbacks contribute to personal development.

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HOW TO REDUCE MATH ANXIETY?