How to Overcome Math Anxiety

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One definition of math anxiety is “the panic, helplessness, paralysis, and mental disorganization that arises among some people when they are required to solve a mathematical problem” (Tobias and Weissbrod 1980)

Math anxiety is a serious and pervasive problem, especially in the community-college setting.
MATH ANXIETY

- **Physical**: Nausea, shortness-of-breath, sweating, heart palpitations, increased blood pressure

- **Psychological**: Memory loss, paralysis of thought, loss of self-confidence, negative self-talk, math avoidance, isolation (thinking you are the only one who feels this way)
CYCLE OF FAILURE

Negative math experience

Math avoidance

Poor preparation

Poor math performance

\[ 45\pi \]

\[ \sqrt{91} \]

\[ x^2 + y^2 \]

\[ \frac{7}{\sqrt{3}} \]
DO YOU HAVE MATH ANXIETY?

Rate your answers from 1 to 5; add them up and check your score below. (1) = Disagree, (5) = Agree.

1. I cringe when I have to go to math class. 1 2 3 4 5
2. I am uneasy about going to the board in a math class. 1 2 3 4 5
3. I am afraid to ask questions in math class. 1 2 3 4 5
4. I am always worried about being called on in math class. 1 2 3 4 5
5. I understand math now, but I worry that it's going to get really difficult soon. 1 2 3 4 5
6. I tend to zone out in math class. 1 2 3 4 5
7. I fear math tests more than any other kind. 1 2 3 4 5
8. I don't know how to study for math tests. 1 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. 1 2 3 4 5
10. I'm afraid I won't be able to keep up with the rest of the class. 1 2 3 4 5

Gowun Park (Graduate Center, CUNY)
DO YOU HAVE MATH ANXIETY?

Check your score:

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-50</td>
<td>No doubt! You have math anxiety.</td>
</tr>
<tr>
<td>30-39</td>
<td>You're still fearful about math.</td>
</tr>
<tr>
<td>20-29</td>
<td>On the fence!</td>
</tr>
<tr>
<td>10-19</td>
<td>Wow! Loose as a goose! You can put this brochure away, or use it for your friends.</td>
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MATH MYTHS

• Some commonly-held, but mistaken, beliefs about learning math
• These “math myths” may contribute to students’ feelings that they will never be good at math because of conditions that they cannot control and cannot overcome
MATH MYTHS

• ONE:
  You have to be born with a mathematical brain
MATH MYTHS

• TWO:

You can’t be creative and be good at math
MATH MYTHS

• THREE:

Women are not as good at math as men
HOW TO REDUCE MATH ANXIETY?

1. Combat your negative thinking
2. Do “easiest” problem/assignment first
3. Start preparing early
4. Visualize yourself succeeding
5. Take good care of yourself
6. Try to understand the “why” of math concepts rather than memorizing
7. Reward yourself for hard work – Have a Math party!

Gowun Park (Graduate Center, CUNY)
I wish you the best of luck in your studies and great success in Math! :D

THANK YOU!