

HOW TO EXCEL IN MATHEMATICS: A GUIDE TO MASTERY

by:

Michael R. Firaza

Teacher III, Pablo Roman National High School

Mathematics is one of the most basic skills and conquering it takes a series of strategies, a lot of persistent practice, and a great mindset. Below are steps to practice to increase your performance in math.

Build a Strong Foundation. Mathematics builds on top of other mathematics. Then you can find some higher concepts difficult to understand as the basics are not clear. Only once you're on firmer ground with these foundational concepts can you start tackling higher-level topics like calculus or trigonometry. Actionable Tips: Go back to older material to clarify it. Read free structured lessons online. Solve problem questions on core concepts periodically.

Practice Regularly. In arithmetic, the adage "practice makes perfect" is especially true. Going through the questions helps in rehearsing the concepts and also helps in recognizing the patterns and solving the problems quicker. Actionable Tips: Set a fixed time every day to practice mathematics. Practice many different kinds of problems to build your confidence. Practice past papers or attempt competitive level.

Develop a Growth Mentality. Although mathematics can be difficult, performance can be greatly improved by adopting a growth mindset, which holds that aptitude increases with effort. The advantages of resilience in the face of scholastic difficulties are demonstrated by research conducted by psychologist Carol Dweck. Actionable Tips: View mistakes as opportunities to learn rather than failures. Treat yourself for little successes to keep you going. Precede the lie with something like, "I do not have this down yet" instead of, "I'm bad at math."

Anyone can become more proficient in mathematics by combining these techniques and making use of the tools that are accessible. Keep in mind that the secret to success is perseverance and the appropriate strategy.

References:

Ashcraft, M. H., & Moore, A. M. (2009). Mathematics anxiety and the affective drop in performance. *Journal of Educational Psychology*, 101(2), 394–409.

Dweck, C. S. (2006). *Mindset: The New Psychology of Success*. Random House.