

**1. What are your thoughts on the origins of Math Hacks/Math Tricks/Recreational Maths? Where do you think they come from?**

Math tricks come from a broader scope of knowledge that is typically provided in school curricula. That is the reason that I have written such a book to share the novelties of mathematics that most people have not been exposed to.

**2. How are they created? What are the principles of creating one?**

There is no “trick” to creating these cute topics that surprise the reader and appeared to be tricks. It’s just a question of taking appropriate topics and presenting them in ways that can attract the general readership and make them appreciate the power and beauty of mathematics.

**3. What goes into deciphering or creating a math hack/math trick?**

To determine what turns out to be a trick, is often exposed very simply through algebra or geometry. However, the use of these topics can be a bit unusual and “quote off the beaten track.” There are also many topics that lend themselves quite well to be proposed as a trick. Some of these cannot be easily explained because they are simply the nature of our decimal system.

**4. In your opinion, do you think math hack/math tricks are important to learn in this generation, or perhaps important for future generations?**

I wouldn’t say learning these tricks is an important aspect of learning mathematics. I think it is largely to convince people that mathematics is not just memorizing and testing but also appreciating the wonders that it produces. As to whether it will influence future generations is simply a question of teachers (and perhaps parents) exposing their children to these topics in a motivating fashion so that they will appreciate mathematics instruction going forward. This should influence future generations.

**5. Mathematics has been famously known as one of the most disliked subjects in school, why do you think this occurred?**

The answer to this question is rather simple. Many teachers, perhaps for “political” reasons, are often engrossed in “teaching to the test.” When this occurs, the teacher is not interested in presenting anything beyond the curriculum. The teacher then misses out on the opportunity to make mathematics interesting and thereby motivating students. This is one of the biggest problems in mathematics instruction in the schools. One of the reasons that this occurs, especially at the lower grades where teachers are not mathematics specialists, is because they themselves never got to like mathematics and simply do it because they have to teach it. And this negativity is contagious to their students.

**6. What are your thoughts on the current curriculums for maths in school (in general)? Is it sufficient for students? If yes, why so? If no, why so, and what methods/ways do you think would become an ideal maths curriculum in academic environments?**

If you compare the mathematics curriculum taught in the schools today much of it was taught at the university level one hundred years ago. We constantly believe – correctly or incorrectly – that moving higher mathematics to lower levels is to the advantage of future generations. I don't believe that! If you look back 50 years in the United States a senior level course in high school was called solid geometry. This was a course on three-dimensional geometry which is hardly touched in today's curriculum. Yet when students study mathematics in college they're expected to know the basic principles of three-dimensional geometry. This is one example of when calculus was brought into the secondary school curriculum and important subject in the building of a good mathematical foundation was eliminated. In the United States the middle grades (6– 8) were often “holding patterns” until students were mature enough to learn more sophisticated material. This, too, was a mistake but the way it's being corrected is not exactly very desirable. Countries need to take a look at mathematics and decide what is appropriate and at which level is that, which is selected, appropriate. One needs to keep in mind the level of mental maturity of the average student in making decisions on curriculum and not political issues that will attract the populace for the wrong reasons.

**7. Does learning math tricks/hacks give benefits to the people who learn it? If so, what are the benefits?**

The only benefits that the tricks have is to exhibit many hidden features of mathematics that seemed to be passed over and not introduced. Used properly, these tricks can be highly motivating to students and as a result improve the teaching process as well as, obviously, the learning process.

**8. Lastly, what are your thoughts on math tricks/math hacks being rarely mentioned in school but so well-known outside of academic environments?**

I don't believe that these math tricks are well-known outside the school curriculum and certainly not amongst the general audience. They been kept well-hidden unintentionally and need to be presented to teachers, parents and the general readership.