



**M**y mother has immense faith in her Gods and it is to them that she turns in times of deep trouble. She turned to them on that day - my day of reckoning – my Class X final Mathematics examination. She saw me off to school at 8 a.m. and went straight in to sit before her Gods in supplication. I returned home at 1 p.m. and there she was - still sitting before them having made every kind of promise in return for a passing grade in Mathematics for her youngest child.

You see, Mathematics and I are old combatants. I have been on the losing side of most of our battles. You will understand when I tell you that it was at age thirty-seven that I finally, but finally, discovered how and why  $(a+b)^2$  could become  $a^2+2ab+b^2$ . This was through sheer necessity and no desire. My son needed some help and out of desperation under very strained circumstances turned to me for support. I had no choice and had to make the attempt to understand this – I could almost hear the cackling laugh of my old enemy's delight at having caught me after many, many years.

Like most children, I didn't mind numbers much up until the time that they began to talk about fractions and decimals and area and perimeter and profit and loss. They even tried to fool us into believing that this wasn't about calculations through something called "word problems". How on earth can a word be a problem? A number is a problem.

I didn't mind shapes much up until they began to ask me areas and angles – why couldn't they have focused on the beauty and weirdness of shapes instead of making us remember measurement formulas and theorems?

I could happily pretend that those x, y, a, b things were actually birds having a meeting until they insisted on converting them into things like

$$(1+x)^n = 1 + \frac{nx}{1!} + \frac{n(n-1)x^2}{2!} + \dots$$

I am forty-four (remember, those are words and not numbers) years old and I firmly believe that Mathematics is the creation of an evil power set out to destroy our peace.

That I actually passed my school final examination is a miracle that I owe to my sainted mother's prayers. My record before that was not pretty – my marks looked more like B. S. Chandrashekhar's batting averages!



*Our Mathematics teacher in high school was always considered the Most Important Person in the school. Her classes were too important to be interrupted by theatre workshops, sports practice sessions or even any laughter. Nobody smiled, there wasn't an extra movement, no pencil boxes fell, no chits were passed round, no giggling or whispering allowed.*



My greatest joy was to bid Mathematics goodbye after Class X and retreat into a world that I understood much, much more – a world of words. This desire for distance from numbers continues even today. I am a shop-keeper's delight – I never calculate how much I need to pay for my purchases, I always go by what is told to me at the shop. I have colleagues who delight in sending me reams of articles dotted with graphs and statistics – those articles have one place of honor: the dustbin. Presentations that have tables and regressions and formulas leave me glassy-eyed. As for using Microsoft Excel – get a life!

I will give you an example : **why on earth must we say it like this(see table on next page)**

Class	RW1			Rw2		RW3	
	N (Number of children)	% at 0 level	% fully able to read all words	% at 0 level	% fully able to read all words	% at 0 level	% fully able to read all words
2	239	74.5	11.3	83.3	5.0	94.1	2.9
3	261	63.6	19.5	70.5	11.5	80.8	6.1
4	230	46.1	38.2	52.2	23.0	64.3	15.6
	RW4			RW5			
2	239	96.2	0.8	92.5	3.0		
3	261	85.4	1.1	83.5	4.6		
4	230	70	6.1	60.9	16.1		

N	RW1		Rw2		RW3		Rw4		Rw5	
	Number of children	% at 0 level	% fully able to read all words	% at 0 level	% fully able to read all words	% at 0 level	% fully able to read all words	% at 0 level	% fully able to read all words	
226	10.2	76.5	17.7	61.1	27	46.9	35.4	38.1	33	40.7
238	5	70.6	11.3	55.5	22.7	45.4	31.9	34	30.3	34
230	1.3	93.5	3.5	87	9.1	80.9	15.7	72.6	6.1	78.3

#### When you can say it like this (the paragraph below):

*The results of the quantitative assessment showed a significant jump in basic language competency among the children. For example, the baseline indicated that 30 per cent of the children in Class 4 were unable to identify letters. There were very few who could read simple words or sentences. The end line results showed that 97 per cent of the children were able to fully identify and match letters and sounds, and use those letters in constructing words and sentences. Ninety-three per cent of children were able to read words without 'matras' and 87 per cent were able to read words with 'matras.'*

Isn't the paragraph coherent, concise, easy to understand and absorb? Why do people continue to believe that a table (which, by the way, is actually a piece of furniture to keep things on) actually "speaks?"

I believe that most sensible minds happily shut down when they see numbers. This was my effort at self-preservation in my Mathematics class as a student and continues to be so as an adult. I had teachers who mostly had one or more of the following five beliefs:

1. You either "get" Mathematics or do not "get" it
2. Mathematics is all about speed and accuracy
3. Mathematics is very tough and needs extraordinary attention, concentration and memory – it is not for ordinary mortals
4. All these formulae and theorems have been discovered by great men – don't waste your time asking about them – just learn
5. Mathematics is the only area of knowledge worth

learning – the king among subjects (literally!) – everything in life is all about Mathematics.

Our Mathematics teacher in high school was always considered the 'Most Important Person' in the school. Her classes were too important to be interrupted by theatre workshops, sports practice sessions or even any laughter. Nobody smiled, there wasn't an extra movement, no pencil boxes fell, no chits were passed round, no giggling or whispering allowed. One had to fiercely concentrate, frown on forehead, sharpened pencil in hand, no questions asked. Our Mathematics class was a sacred ritual – no less. The mood was always sombre, and to me, funereal. My dearest wish was to have a quick burial of the subject, its text-books and (forgive me, My Lord)....its teachers.....

As an adult (and after much persuasion), I read the

biography of Srinivasa Ramanujan - his obsession with numbers, his relationship with Hardy the way he used to, work out complex equations in the sand on Marina Beach and how he wrote much of what was to be his seminal work on bits of paper during stolen moments from his job as a clerk at the Madras Port Trust.

This was a different world – here Mathematics was elegant, was beautiful, was logical and had a story to tell!

The Mathematics I knew was everything but.

So my friends, I have decided that my teachers were right after all – this is not a subject for ordinary mortals. This is for the Ramanujans, the Hardys and that strange and alien species called "lovers of numbers." As for me, I will continue to inhabit a world in which Mathematics is a predatory force from which I am in eternal flight.

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