Mathematics Can Be Fun

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(Source: Pixabay)

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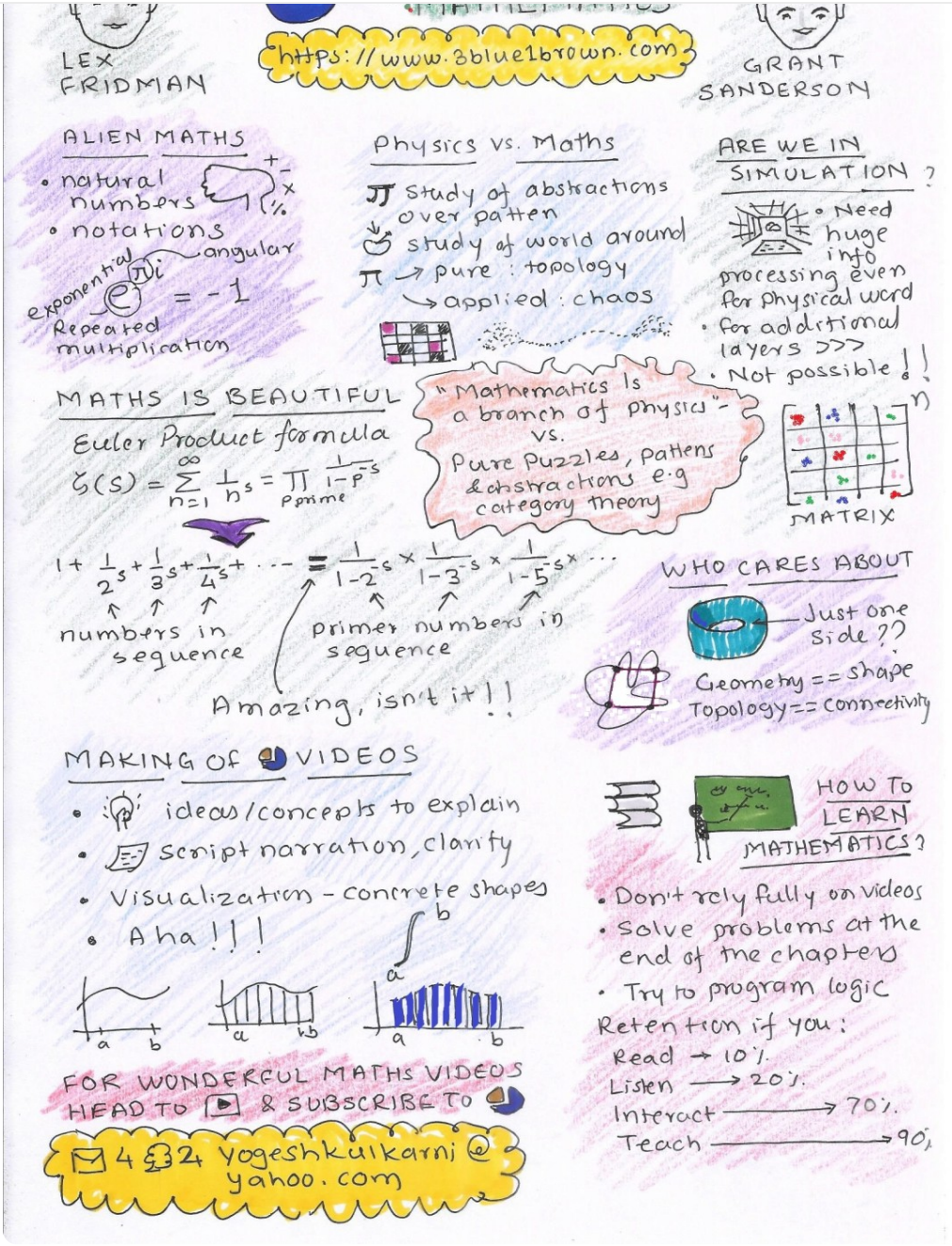
12 articles

My childhood days, apart from playing cricket and doing paintings were also filled with reading wonderful books from a Russian publication house called `Mir Publishers`. One of the favorites there was, `Mathematics Can Be Fun` by Yakov Perelman. Wonderfully lucid explanations, palatable to everyone. Now in this digital era this mantle seems to have been borne by folks like Grant Sanderson, who through animations are making Mathematics, Fun (and not funny though).

Here is my one pager sketchnote on Grant's interview with Lex Fridman.


LEX FRIDMAN
https://www.3blue1brown.com
GRANT SANDERSON
ALIEN MATHS
• natural numbers
• notations
exponential
angular
Repeated multiplication
Physics vs. Maths
study of abstractions over patten
study of world around
pure : topology
applied : chaos
ARE WE IN SIMULATION ?
• Need huge info processing even for physical word
• for additional layers >>>
• Not possible !!
MATHS IS BEAUTIFUL
Euler Product formula
"Mathematics is a branch of physics" - vs.
Pure Puzzles, Pattens & abstractions e.g category theory
MATRIX
numbers in sequence
primer numbers in sequence
Amazing, isn't it!!
WHO CARES ABOUT
Just one side ??
Geometry == shape
Topology == Connectivity
MAKING OF VIDEOS
• ideas/concepts to explain
• script narration, clarify
• Visualization - concrete shapes
• Aha !!!
HOW TO LEARN MATHEMATICS ?
• Don't rely fully on videos
• Solve problems at the end of the chapters
• Try to program logic
Retention if you :
Read → 10%.
Listen → 20%.
Interact → 70%.
Teach → 90%
FOR WONDERFUL MATHS VIDEOS HEAD TO & SUBSCRIBE TO
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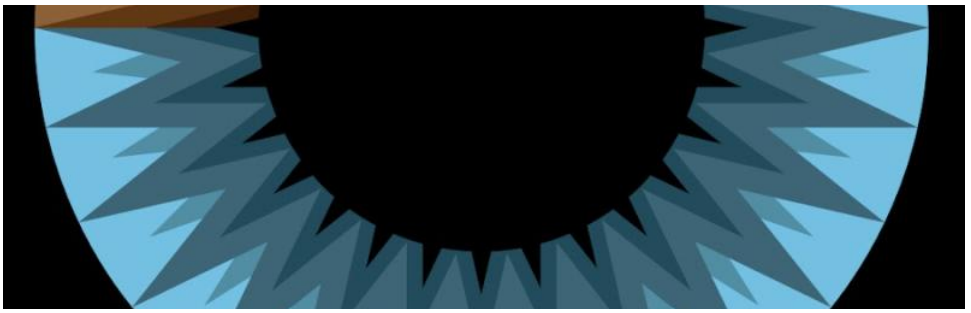
References

3Blue1Brown

3blue1brown.com

Mathematics with a distinct visual perspective. Linear algebra, calculus, neural networks, topology, and more.



3Blue1Brown - YouTube

youtube.com

3Blue1Brown, by Grant Sanderson, is some combination of math and entertainment, depending on your disposition. The goal is for explanations to be driven by a...

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I happened to hear Grant Sanderson live during Open Data Science Conference (ODSC) a couple of years back, and was fascinated by his approach of teaching complex subjects, such as neural networks and mathematics in general. His motto seems to be `from concrete to abstract`. He is a creator of a well known YouTube channel, 3Blue1brown, essentially teaching complex mathematics (and allied subjects) with animations.

Here is my article (with a sketchnote) summarizing interview of Grant with Lex Fridman. It gives glimpse of the man behind and his range/prowess of mathematics. He is also a creator of a fascinating animation programming library in python, called `manim` (Mathematics Animation). Highly recommended!!

#ml #machinelearning #ai #artificialintelligence #datascience #deeplearning #neuralnetworks #data #mit #lexfridman #neuralnetworks #tech #Innovation #technology #artificialgeneralintelligence #course #academics #mathematics #manim #3b1b #3blue1brown #python #programming #animation #teaching