GETTING INTO STEM

by starting with math

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Math in People's Lives

Proficiency in Math/Reasoning

- foundation-building
- "boring"
- worksheets with exercises on addition, ... derivatives
- often the focus of school math

Interest

• up to the individual

IMPORTANT

- intrinsic motivation
- enjoyment of some aspect of problem solving, understanding the world, etc.



Interest in STEM

STEM Contests

STEM Career



INSPIRING INTEREST

Inspiring Interest in STEM

- Do math in groups with friends (or on Zoom calls)
- Do science experiments at home
- Games and Puzzles
 - 24, Fish, Spider Solitaire
 - https://puzzlemadness.co.uk/
 - Logic puzzles



CONTESTS

STEM Contests

- Math Kangaroo (1-12)
- CIE MCMF (1-8)
- **■** UIL/TMSCA (≤ 12)
- Mathcounts (6-8)
- AMC 8
- AMC 10/12
 - AIME
 - USA(J)MO

- Math Prize for Girls/Olympiad
- Harvard-MIT Math Tournament (HMMT)
- American Regional Math League (ARML)
- Princeton University Math Competition (PUMaC)
- Online Math Open (OMO)
- UT Arlington Calculus Bowl

- Regional Science Fairs
- Science Olympiad
- USA Olympiads
- National Science Fairs

HOW DID I GET INTO STEM? WHAT DO I PLAN ON DOING?

Math in My Life

Proficiency in Math/Reasoning

- Dad worked on foundation with me
- Took math classes at school and online
- Read math books on my own

Interest

- Math with my friends
- Games and puzzles
- Introduced to conteststyle problem solving



Interest in STEM





