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
• 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 contest-style problem solving

Interest in STEM

STEM Contests

STEM Career?