An Automated Graphing System for Mathematical Pedagogy

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MERLYN MIND™

- Generative AI can simplify the tools available to teachers
- Automated tool-using systems can allow teachers to easily control tools
- Automated graphing system converts utterances into mathematical expressions and graphs them with Desmos
- Incorporates mathematical solver into LLM system
- Results show that the addition of the mathematical solver significantly increases accuracy

Use LLM to rephrase input question into a Wolfram Alpha query

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Wolfram Alpha provides a result and step-by-step solution

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LLM writes a detailed explanation

LLM writes a set of Desmos expressions to graph