

How good are LLMs at Maths Research? Some case studies, and tips for good prompts.

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How good are state-of-the art LLMs at logic? That is a central question for the development of AI. How good are they at finding new connections between a priori distinct mathematical structures? It might take your breath away. I will discuss some down to earth examples related to current maths research where LLMs delivered an impressive performance. I will also discuss current limitations, as well as prompt engineering to obtain better logic performance.