

The hottest new team sport? Math.

Friday, July 24, 2026

Today's top story, from reporter Aili McConnon:

As the World Cup final kept the world on the edge of its seat, AI nonchalantly scored a victory of its own against a mathematical problem that had been undefeated since 1939. An Anthropic employee used his "close friend Fable," as he described Anthropic's Claude Fable 5 in a tweet while he watched the World Cup, to disprove the Jacobian conjecture, a famous open question about polynomial functions.

It's the latest in a string of AI-driven discoveries on decades-old math and science puzzles this year (remember the Erdős unit distance problem that OpenAI solved in May?), with the stories going viral as people worry what this signals for job losses. But experts say these breakthroughs are no reason to despair.

On this week's episode of the Mixture of Experts podcast, the panel discussed how people should focus more on what AI might help humans gain, rather than what we might lose.

The key insight with the recent Jacobian breakthrough, said Olivia Buzek, a Lead Developer Advocate for AI at IBM, was that many longstanding problems don't require a flash of genius so much as the ability to explore an impossibly large number of possibilities. In this case, she said, "the Jacobian conjecture was not unsolvable by a human. It's just that the model tried more things."

That ability to supercharge search extends far beyond mathematics, said Kaoutar El Maghraoui, a Principal Research Scientist at IBM. She sees AI as a powerful engine for exploring enormous, multidimensional search spaces across science, engineering, medicine, cybersecurity, chip design and physics. "It's allowing theoreticians to tackle harder problems," she said. "AI [has] become a really powerful research partner."

Does this mean that anyone with a chatbot can solve problems that have stumped humanity for decades? Not so fast, said Ambhi Ganesan, an AI Transformation Leader at IBM. The best AI results come when humans steer the technology. Disproving the Jacobian conjecture, he said, was a "function of somebody who is capable of steering the agent and the model really well."

The emerging pattern is clear: great mathematicians, engineers, consultants and scientists get more out of AI because they know how to guide it, Ganesan said. "Folks who have a solid grounding and expertise and taste are able to gather way more potent outputs."

The future, then, will likely belong to people who know how to ask the right questions. AI has become a powerful discovery engine, but humans remain the navigators.

"The era of the solitary mathematician staring at a chalkboard for three years is officially over," El Maghraoui said, adding that mathematics is becoming a "machine-assisted team sport."

As for the question of whether mathematicians are in trouble? "No, but their work might change," she said. "The real pressure here will be on mathematicians who refuse to use these tools."