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Artificial Intelligence in Mathematics Education: Supporting Teachers in Enriched Learning Environments

This presentation offers an accessible and thoughtful exploration of how artificial intelligence (AI) is reshaping the professional practice of mathematics teachers, particularly in enriched or advanced learning contextswhere problem-solving, mathematical reasoning, and creativity are emphasized.

We will explore how AI tools—such as GeoGebra AI, Wolfram Alpha, Photomath, and even intelligent tutoring systems—can support teachers rather than replace them. From automating repetitive tasks to providing personalized feedback and tracking student progress, AI has the potential to enhance instructional practices and free up time for deeper pedagogical work.

At the same time, the presentation will address ethical and didactic considerations, particularly the importance of maintaining student autonomy in reasoning and ensuring critical engagement with digital tools. Emphasis will be placed on how to integrate AI meaningfully while preserving the core of human-centered mathematics teaching.

This session is designed to inspire reflection and provide practical insights into how teachers can leverage AI as a pedagogical ally—especially in classrooms where mathematical thinking is pushed further.