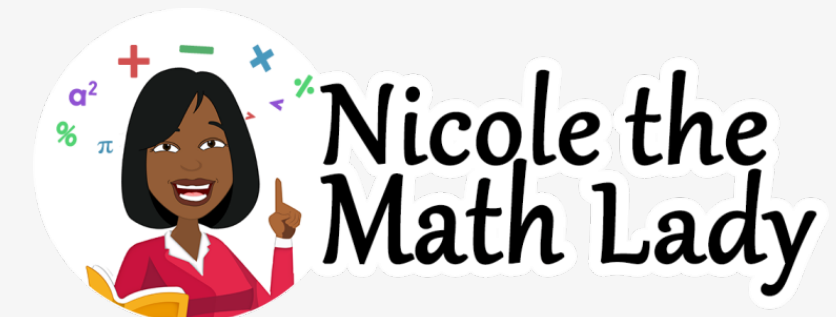# Digital Integrity

How to Ensure Students Use Technology and AI Responsibly in Math

Nicole the Math Lady

How can the use of technology/AI help—or hurt—students in math?

BLOCKED!
BY PARENTAL CONTROL

CLOSE WINDOW

Objectives

- Learn the 7 Technology/AI app types students can use
- Understand the benefits and risks of using technology/AI in math.
- Learn strategies to promote responsible use among students.

Digital Integrity

The practice of using technology and artificial intelligence responsibly, ethically, and effectively while learning.
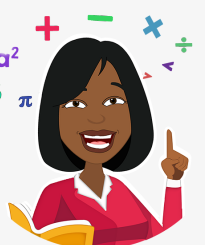
7 Types of Apps/AI Tools for Math

Personalized Learning Paths

Khan Academy

Uses AI to tailor learning paths and offer personalized quizzes.

Khanmigo

Khanmigo challenges you to think critically and solve problems without giving you direct answers. Learn new skills anytime, whether it's algebra, SQL, or essay writing.
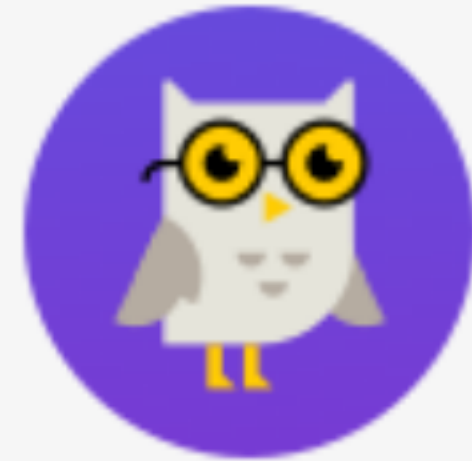
Instant Solutions

photomath
smart camera calculator

Socratic

M Mathway

Solves math problems with step-by-step explanations using AI and OCR (optical character recognition).

Explains solutions to math problems by breaking them into easy-to-understand steps using AI.

Provides instant solutions for math problems and detailed explanations.

Problem-Solving & Homework Assistance

Microsoft Math Solver

AI scans math problems and provides step-by-step solutions with graphs and examples.

BRAINLY

Community-powered app with AI tools to offer quick answers to math questions.

cymath

AI solver for algebra, calculus, and basic math problems.

Practice and Assessment Tools

Adaptive learning platform for K-8 math that adjusts based on student progress.

Uses AI to generate personalized recommendations and analytics for student progress.

Gamified learning app with AI-driven recommendations for practice areas.

Games for Math Learning

Happy Numbers

SplashLearn

AI adapts math games for early learners, focusing on foundational skills.

AI-driven platform for grades K-5 that uses gamified activities to teach math concepts.

Visualizing Math Concepts

desmos

AI-enhanced graphing calculator that allows users to visualize functions and equations dynamically.

GeoGebra

Combines AI-driven dynamic geometry, algebra, and calculus for interactive learning.

Symbolab

Visualizes algebraic, calculus, and graphing problems using AI.

Exam Prep & Analytics

AI identifies knowledge gaps and personalizes test prep for K-12 and higher education.

AI suggests study paths based on performance in math flashcards and quizzes.

Benefits

Individualized Support

Efficient Practice

Instant feedback

Accessibility

Engaging and interactive learning experiences

Risks

- Over-reliance

- Critical Thinking Decline

- Cheating/Inappropriate Use

Do's & Don'ts

🚫 Use AI to do the work for you

✅ Solve problems independently and use AI to check answers

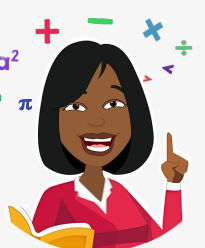🚫 Copy solutions without attempting to understand

✅ Use AI to fill in gaps of understanding

🚫 Use for tests or graded assignments

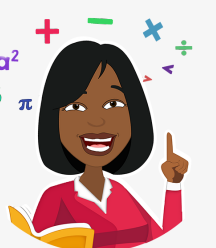✅ Using AI tools to complete homework

Scenarios

How would you handle...?

1 A student uses Photomath to complete all homework.

2 A group project involves AI, but one member does all the work using technology.

3 A student uses AI to cheat on a math test.

How do you know if a math app is best for your student?

Ease of Use
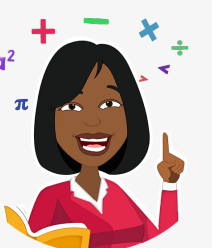Is the tool user-friendly for the intended age group?

Learning Enhancement
Does the tool explain solutions or just give answers?

Shortcut Potential
Can students misuse the tool to avoid learning?

"AI is like a calculator—

it's powerful, but only when used appropriately."

- Saxon Math Videos & Grading

- Singapore Math Videos & Grading (Coming this Fall)

- Average annual price: $79 per student

SIGNUP FOR A FREE TRIAL

You don't have to have the books for the free trial!

- Learn Addition & Subtraction Math Facts in 60 days

- Learn Multiplication & Division Facts in 90 days

- $21.99 for a single student

Workshop Handouts