Matrix Multiplication Properties

Today's Standard

HSN.VM.C9 - (+) Understand that, unlike multiplication of numbers, matrix multiplication for square matrices is not a commutative operation, but still satisfies the associative and distributive properties.

Real-World Applications for this Standard

Computer graphics transformations; Quantum computing algorithms; Economics input-output models; 3D game development; Robot kinematics

Today I Learned

Today, we learned about matrix multiplication. It's different from regular multiplication because the order matters. But, it still follows some rules like grouping and distributing.

Common Stumbling Blocks

Some kids think that you can switch the order when multiplying matrices, but that's not true. Others think that matrices don't follow the grouping rule, but they do.

Quiz Me

- What is matrix multiplication?

- Can you switch the order in matrix multiplication?

- Does matrix multiplication follow the grouping rule?

- What happens if you switch the order in matrix multiplication?

- Can you give an example of where we use matrix multiplication?

Help Me

Matrix multiplication is like a special kind of math used in computers and games. It's important to know that you can't switch the order, but you can group them in different ways.