Creating Invertible Functions

Today's Standard

HSF.BF.B4d - (+) Produce an invertible function from a non-invertible function by restricting the domain.

Real-World Applications for this Standard

Determining the optimal range of temperatures for chemical reactions; Optimizing profit in business by restricting certain variables; Restricting the domain of a function in computer graphics to prevent errors; Adjusting sound frequencies in audio engineering

Today I Learned

Today, we learned how to make a function invertible by only using certain numbers. This helps us solve more problems in math.

Common Stumbling Blocks

Some kids might think that any function can be made invertible without any changes. Others might think that changing the domain changes the function itself. Both are not true.

Quiz Me

- What is an invertible function?
- How do we make a function invertible?
- What does domain mean?
- Why do we restrict the domain?
- Can you give an example of domain restriction?

Help Me

To make a function invertible, we only allow certain numbers to be used. This helps us in many real-world problems, like making sure a computer program works correctly or finding the best way to make money in a business.