Creating Invertible Functions

Today's Standard

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

Cues	Notes
What is an invertible function?	An invertible function is a function that has an inverse, meaning each output is paired with exactly one input.
How can a non-invertible function be made invertible?	A non-invertible function can be made invertible by restricting its domain so that each output is paired with only one input.
What is domain restriction?	Domain restriction involves limiting the set of inputs for a function to ensure it becomes invertible.
Why is domain restriction important?	Domain restriction is important because it allows functions to be used in more advanced mathematical contexts and real-world applications.
Examples of domain restriction in real life	Examples include optimizing business profits, adjusting sound frequencies, and preventing errors in computer graphics.

Summary

Understanding how to produce an invertible function from a non-invertible one by restricting the domain is crucial for advanced math and real-world applications. Key concepts include invertible functions, domain restriction, and practical examples.