Verifying Inverse Functions

Today's Standard

HSF.BF.B4b - (+) Verify by composition that one function is the inverse of another.

Cues	Notes
What is an inverse function?	An inverse function reverses the effect of the original function.
How do you verify an inverse function?	To verify, check if both $f(g(x)) = x$ and $g(f(x)) = x$.
What is function composition?	Function composition is applying one function to the result of another.
Why are bijective functions important?	Bijective functions are necessary for inverses because they are both one-to-one and onto.
What are common misconceptions about inverse functions?	Misconceptions include thinking any function has an inverse and only one direction of composition needs verification.

Summary

Inverse functions reverse the effect of the original function. Verification requires checking both directions of composition. Only bijective functions have inverses.