Inverse Functions and Their Solutions

Today's Standard

HSF.BF.B4a - Solve an equation of the form f(x) = c for a simple function f that has an inverse and write an expression for the inverse. For example, $f(x) = 2x^3$ or f(x) = (x+1)/(x-1) for $x \neq 1$.

Real-World Applications for this Standard

Calculating the time needed to reach a certain speed when acceleration is constant.; Determining the original price of an item after a discount has been applied.; Finding the amount of a substance needed to achieve a certain concentration in a solution.

Today I Learned

Today, we learned about inverse functions. These are special functions that reverse the operations of the original function.

Common Stumbling Blocks

Sometimes, kids think every function has an inverse, but only certain ones do. Another common mistake is mixing up how to find an inverse with solving the original function.

Quiz Me

- What is an inverse function?
- Do all functions have inverses?
- What does a one-to-one function mean?
- How can you find an inverse function?
- Can you draw a function and its inverse?

Help Me

Inverse functions are used in many real-world situations, like figuring out the original price of an item after a discount or calculating how long it takes to reach a certain speed. Understanding them helps solve many practical problems.