Composing and Combining Functions

Today's Standard

HSF.BF.A1c - (+) Compose functions. For example, if T(y) is the temperature in the atmosphere as a function of height, and h(t) is the height of a weather balloon as a function of time, then T(h(t)) is the temperature at the location of the weather balloon as a function of time.

Real-World Applications for this Standard

Predicting temperature changes with weather balloons; Calculating compound interest over time; Modeling population growth in ecosystems; Determining the speed of a car given time and distance functions

Today I Learned

Today, we learned about combining functions in math. For example, if we know the temperature at different heights and the height of a balloon over time, we can find the temperature where the balloon is.

Common Stumbling Blocks

Sometimes, kids think the order of combining functions doesn't matter, but it does! Another tricky part is knowing which number to use first when putting functions together. We'll use pictures and practice to get it right.

Quiz Me

- What is a function?
- Why does the order of combining functions matter?
- Can you give an example of combining two functions?
- What happens if we mix up the order of functions?
- How can we practice combining functions?

Help Me

Combining functions is like following a recipe. First, you do one step, then use the result for the next step. For example, if you know how high a balloon goes and the temperature at that height, you can find the temperature where the balloon is.