Function Domains and Graphs

Today's Standard

HSF.IF.B5 - Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function h(n) gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function.*

Real-World Applications for this Standard

Determining the appropriate domain for a cost function in a business setting; Analyzing population growth models in biology; Relating time and distance in physics problems; Evaluating the domain of revenue functions in economics

Today I Learned

Today, we learned about how to find the domain of a function. The domain is the set of all possible input values for a function. For example, if we are counting how many hours it takes to build something, the domain would be positive numbers because we can't have negative hours.

Common Stumbling Blocks

Sometimes, kids might think that the domain is always all numbers, but that's not true. The domain depends on what we're talking about. Another tricky part is mixing up the domain and the range. The domain is the input values, and the range is the output values.

Quiz Me

- What is the domain of a function?
- Can the domain be all numbers?
- What is the range of a function?
- Why is the domain important?
- What is an example of a domain?

Help Me

The domain of a function is all the possible input values we can use. For example, if we're talking about how many hours it takes to build something, we can't have negative hours, so the domain would be positive

numbers. This helps us understand and solve real-world problems better.