

Graphing Complex Functions

Today's Standard

HSF.IF.C7b - Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.

Real-World Applications for this Standard

Modeling population growth using step functions.; Determining the cost of shipping with piecewise-defined functions.; Analyzing physical phenomena like free-fall motion with square root functions.; Engineering applications involving stress-strain curves using absolute value functions.

Today I Learned

Today, we learned about graphing different kinds of functions, like square root, cube root, and piecewise-defined functions. These are special math rules that help us understand and draw pictures of how things change.

Common Stumbling Blocks

Some kids might think that the square root function is a straight line, but it actually has a curved shape. Others might mix up piecewise-defined functions with single functions, but piecewise functions have different parts.

Quiz Me

- What is a square root function?
- Can a cube root function take any number?
- What is a piecewise-defined function?
- What does a step function do?
- What shape does an absolute value function make?

Help Me

We use these functions to solve real problems. For example, step functions can help figure out shipping costs, and square root functions can help understand how things fall. Learning these functions helps us understand and solve everyday problems!

