

# **Comparing Different Functions**

## Today's Standard

HSF.IF.C9 - Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.

#### Real-World Applications for this Standard

Analyzing profit vs. cost in business scenarios; Comparing growth rates in different populations; Evaluating physical phenomena like speed vs. time; Interpreting data from scientific experiments

#### Today I Learned

Today, we learned how to compare different kinds of math functions. We looked at graphs, equations, tables, and stories to see how they show the same math ideas.

## Common Stumbling Blocks

Sometimes kids think that different kinds of math functions can't be compared. They might also think that only the highest or lowest points matter. But other parts, like where the line crosses the axes, are important too.

#### Quiz Me

- Can you show me a graph of a function?
- What is an algebraic expression?
- How do you find the maximum point on a graph?
- What does it mean if a function is increasing?
- Can you compare a graph to an equation?

## Help Me

In the real world, we use math functions to understand things like business costs, population growth, and science experiments. By comparing different functions, we can make better decisions and understand more about how things work.