Graphing Linear and Quadratic Functions

Today's Standard

HSF.IF.C7a - Graph linear and quadratic functions and show intercepts, maxima, and minima.

Real-World Applications for this Standard

Analyzing the trajectory of a projectile in physics.; Modeling profit and loss in a business scenario.; Predicting population growth or decline in biology.; Designing parabolic arches in architecture.

Today I Learned

Today, we learned how to draw lines and curves on a graph. We also found special points like where the line crosses the axes and the highest or lowest points on the curve.

Common Stumbling Blocks

Sometimes kids think the highest or lowest point on a curve is always in the middle, but it can be anywhere. They might also think straight lines can have high or low points, but they can't.

Quiz Me

- What do we call the point where the line crosses the x-axis?
- What is the highest point on a curve called?
- Can a straight line have a highest point?
- What shape does a quadratic function make?
- Where does the line cross the y-axis?

Help Me

We learned how to draw lines and curves on a graph. For example, we can use these graphs to see how high a ball will go when we throw it or how much money we can make with a business. This helps us understand real-world problems better.