



Growth Patterns in Functions

Today's Standard

HSF.LE.A1a - Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals.

Cues	Notes
Linear functions	Linear functions grow by equal differences over equal intervals.
Exponential functions	Exponential functions grow by equal factors over equal intervals.
Growth rates	Graphing helps visualize differences in growth rates.
Real-world applications	Applications include population growth, finance, and science.
Common misconceptions	Misconception: Linear and exponential functions grow at the same rate. Misconception: Exponential growth is always faster.

Summary

Understanding the growth patterns of linear and exponential functions is essential. Linear functions grow by equal differences, while exponential functions grow by equal factors. These concepts are crucial for real-world applications and avoiding common misconceptions.