

High School Algebra Playlist: Calculating Average Rate of Change

Aligns with [CCSS.Math.Content.HSF.IF.B.6](#): Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.

Related Standards

- [CCSS.Math.Content.HSF.IF.A.1](#): Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x . The graph of f is the graph of the equation $y = f(x)$.
- [CCSS.Math.Content.HSF.IF.B.4](#): For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. *Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.*

PREVIEW



Objectives

In this module, you will learn and practice the following skills:

- calculate the rate of change of a function over a specified interval
- estimate a rate of change

Let's get started!

Key Terms

- A **function** is a relation which has each input related to exactly one output.
- The **slope** of a line is its rate of change.

Connections

- <https://openstaxcollege.org/textbooks/algebra-and-trigonometry>; section 3.3.1

PREVIEW



Calculating Average Rate of Change

([CCSS.Math.Content.HSF.IF.B.6](#))

A **function** is a relation which has each input related to exactly one output. The **slope** of a line is its rate of change.

If your students...

Miscalculate slope:

Students often have trouble calculating slope, typically mixing up the x and y values. Remind students that slope is rise over run and that slope is constant throughout a line.

WATCH: Find the slope of a linear function

https://learnzillion.com/lesson_plans/6660#fndtn-lesson

PREVIEW

