

High School Algebra Playlist: Graphing Exponential, Logarithmic, and Trigonometric Functions

Aligns with [CCSS.Math.Content.HSF.IF.C.7.e](#): Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude.

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.C.7](#): Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases

PREVIEW



Objectives

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

- graph exponential and logarithmic functions and understand the relationship between them
- graph trigonometric functions

Let's get started!

Key Terms

- An **exponential function** is a function of the form $f(x) = ab^x$.
- The **logarithm** of a number is the exponent to which the base must be raised to produce that number.
- A **logarithmic function** is a function of the form $f(x) = \log_b x$.
- The **trigonometric functions** are functions of an angle; they include the sine and cosine functions.

Connections

- <https://openstaxcollege.org/textbooks/algebra-and-trigonometry>; section 6.2
- <https://openstaxcollege.org/textbooks/algebra-and-trigonometry>; section 6.3
- <https://openstaxcollege.org/textbooks/algebra-and-trigonometry>; section 8.1

