

Exponential, Logarithmic, and Piecewise Functions Lesson Objectives

Exponential Functions and Graphs Lesson

Determine if a function is an exponential function

Analyze the graphs of exponential functions

Identify and graph transformations of exponential functions

Identify the graphs of exponential functions with base e

Logarithmic Notation Lesson

Convert between logarithmic and exponential forms

Evaluate a logarithm without a calculator

Graphs of Logarithmic Functions Lesson

Identify and graph transformations of logarithmic functions

Compare and contrast the graphs of logarithmic functions containing different bases

Graph logarithmic functions

Logarithm Rules and Solving Logarithmic Equations Lesson

Expand a logarithmic expression

Rewrite a multi-term logarithmic expression as a single logarithm

Solve logarithmic equations

Solve logarithmic equations containing composite functions of logarithms

Solving Exponential Equations Lesson

Solve exponential equations, including those containing powers with different bases

Solve exponential equations in quadratic form

Use the change of base formula to evaluate a logarithm with a calculator

Piecewise Functions Lesson

Evaluate a piecewise function

Write the equation of a piecewise function

Graph a piecewise function

Identify discontinuities in the graph of a piecewise function