

# 18 Topic: Log Applications Copied from: All Algebra 2, Copied on: 02/28/22 Copied from: Algebra 2A , Copied on: 02/28/22 Copied from: Algebra 2A , Copied on: 02/28/22

Content Area: **Mathematics**  
Course(s): **Algebra 2**  
Time Period: **Semester 2**  
Length: **2-3 weeks**  
Status: **Published**

## Standards

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MA.K-12.1	Make sense of problems and persevere in solving them.
MA.K-12.4	Model with mathematics.
MA.K-12.6	Attend to precision.
MA.F-LE.A.4	Understand the inverse relationship between exponents and logarithms. For exponential models, express as a logarithm the solution to $ab$ to the $ct$ power = $d$ where $a$ , $c$ , and $d$ are numbers and the base $b$ is 2, 10, or $e$ ; evaluate the logarithm using technology.

## Enduring Understandings

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1. Mathematics is a language consisting of symbols and rules.
2. The same mathematical ideas can be represented concretely or symbolically.
3. There can be different strategies to solve a problem, but some are more effective and efficient than others.

## Essential Questions

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- How will the student solve log equations?
- How will the student use the Change of Base Formula?
- How will the student get a log equation into calculator ready form?
- How will the student solve Log word problems?
- How will the student solve Exponential Growth and Decay problems?
- How will the student solve Compound Interest problems?

## Knowledge and Skills

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Solve Log equations

Use Change of Base formula

Understand and Use TI-83 calculator

Understand and Use Calculator ready form

Solve compound interest, exponential growth, and decay problems

## **Resources**

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1. McDougal/Littell - Algebra & Trigonometry Structure & Method Book 2
2. Aufmann/Barker/Lockwood - Intermediate Algebra with Applications Sixth Edition
3. Houghton/Mifflin/Harcourt - On Core Mathematics Algebra 2
4. Holt - Algebra 2 with Trigonometry
5. Larson/Boswell - Big Ideas Math: Algebra 2 Texas Edition
6. [Khan Academy](#)
7. [PurpleMath](#)
8. [KutaSoftware](#)
9. [CK-12](#)
10. [Quizlet](#)
11. [Albert I/O](#)
12. [Desmos](#)
13. [Problem Attic](#)