

Learning Goals Unit 2

Exponential And Logarithmic Functions

Learning Goals:

- **Solve Exponential Equations and sketch Exponential Functions**
- **Simplify Logarithmic expressions using Log Properties**
- **Solve Logarithmic Equations and sketch Logarithmic Functions**
- **Apply Exponential Equations to solve problems**

Topic	I have reviewed it.	I have done a question.
Exponents		
Evaluating numeric expressions with exponents - whole number, zero, negative, rational		
Exponent Laws		
Common Factoring Binomial Powers		
Solving Exponential Equations (Common Base)		
Solving Exponential Equations (log or ln of both sides)		
Sketch Exponential Functions		
Logarithms		
Definition of a Logarithm		
Evaluating Logs (using of definition of a log)		
Logarithmic form vs. Exponential form		
Common Log (base 10)		
Natural Log (base 'e')		
Properties of Logs		
Change of Base Identity		
Reciprocal Identity		
Sketch Logarithmic Functions		
Solving Log Equations, Type I (log = #)		
Solving Log Equations, Type II (log = log)		
Solving Log Equations, Type III (different bases, try using change of base identity)		
Applications		
Applications Growth and Decay		
- solve for Final Amount		
- solve for Initial Amount		
- solve for “growth/decay” rate		
- solve for time		
- solve for length of “growth period”		
Logarithmic Scales		
- pH		
- Richter Scale		
- Decibel		