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| **Unit 7/8 Exponential/Logarithms** |
| **Concepts*** Day 1- Sequences
* Day 2- Series
* **Honors Day 3- Sequences and Series continued**
* Day 3- Exponentials- properties, interest, intro to “e”
* Day 3- Graphing Exponentials
* Day 1- Logarithms, inverses, converting between two forms
* Day 2- Logarithms, properties
* Day 3- Logarithms, solving logarithmic equations
* Day 4- Logarithms, graphing
* Day 5- Modeling
 | **Core**F.IF.7F.BF.4F.LE.4F.IF.7A.REI.11F.BF.1A.SSE.4Objectives:I can calculate terms of sequencesI can write a series with sigma notationI can derive the formula for the sum of a geometric series (when the common ratio is not 1) I can use the formula of a geometric series to solve problemsI can apply exponential properties and use themI can graph exponential functions given an equationVocabulary: sequence, series, sigma, summation, “e”, asymptote, exponentials growth, decay, recursive, explicitI understand that the logarithm is the inverse of an exponential**I can verify an inverse function using composition**I can convert between logarithm and exponential formI can graph logarithmic functions.I can solve exponential and logarithmic equationsI can use exponentials and logarithms to model real world problemsI can solve for a different variable in an exponential literal equationVocabulary: logarithm, inverse, base, argument, exponent, change of base formula, asymptote, common log, product/sum/difference/quotient/power properties, inverse/identity property, natural log | **Resources** Financial Task (house car)Earthquake taskpH tasksDay 1- 12.1, 12.2Day 2- 12.3Day 3- Module 13Day 1- 15.1Day 2- 16.1Day 3- 16.2Day 4- 15.2Day 5- Module 14 (throughout) |