| Video Title | Grade Level | Domain (Topic) | Cluster | Standard |
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| Solving for Exponents | HS - Algebra | Seeing Structure in Expressions | Interpret the structure of expressions | CCSS.MATH.CONTENT.HSA.SSE.A. 1 Interpret expressions that represent a quantity in terms of its context. |
|  |  |  |  | CCSS.MATH.CONTENT.HSA.SSE.A.1.B Interpret complicated expressions by viewing one or more of their parts as a single entity. For example, interpret $P$ $(1+r) n$ as the product of $P$ and a factor not depending on $P$. |
|  | HS - Algebra | Seeing Structure in Expressions | Write expressions in equivalent forms to solve problems | CCSS.MATH.CONTENT.HSA.SSE.B. 3 Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. |
|  | HS - Algebra | Reasoning with Equations and Inequalities | Understand solving equations as a process of reasoning and explain the reasoning | CCSS.MATH.CONTENT.HSA.REI.A. 1 Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. |
|  | HS - Algebra | Reasoning with Equations and Inequalities | Represent and solve equations and inequalities graphically | CCSS.MATH.CONTENT.HSA.REI.D. 11 Explain why the x-coordinates of the points where the graphs of the equations $y=f(x)$ and $y=g(x)$ intersect are the solutions of the equation $f(x)=g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions. |
|  | HS - <br> Functions | Building Functions | Build new functions from existing functions | CCSS.MATH.CONTENT.HSF.BF.B. 5 Understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents. |

