

Name: Langteau		Grading Quarter: 4	Week Beginning: 3
School Year: 2024/2025		Subject: Algebra 1	
Monday	Notes:	<p>Objective:</p> <p>Students will be able to define exponential functions and identify their key characteristics while comparing them to linear functions</p> <p>Lesson Overview:</p> <p>The lesson will begin with real-world examples of exponential growth and decay, followed by a comparison of linear and exponential growth using tables and graphs. Students will then explore the general form of an exponential function, and discuss how it differs from linear equations.</p>	<p>Academic Standards:</p> <p>HSF-IF.C.8b – Identify key features of exponential functions and compare them to linear functions.</p>
Tuesday	Notes:	<p>Objective:</p> <p>Students will be able to graph exponential functions using a table of values and identify key features such as asymptotes, intercepts, and growth versus decay.</p> <p>Lesson Overview:</p> <p>The lesson will start with a review of exponential functions and their general form, followed by a step-by-step demonstration of how to create a table of values and plot an exponential graph. Students will explore transformations such as reflections and shifts and discuss their impact on the function's behavior.</p>	<p>Academic Standards:</p> <p>HSF-IF.C.7e – Graph exponential functions and show key features.</p>
Wednesday	Notes:	<p>Objective:</p> <p>Students will be able to apply transformations, including translations, reflections, stretches, and compressions, to exponential functions and compare the graphs of parent functions to their transformations.</p> <p>Lesson Overview:</p> <p>The lesson will introduce different types of transformations and how they affect the equation. Students will analyze graphical representations of shifts, reflections, and stretches, then practice applying transformations to different exponential functions.</p>	<p>Academic Standards:</p> <p>HSF-LE.A.2 – Recognize that geometric sequences are exponential functions.</p>

Thursday	Notes:	<p>Objective:</p> <p>Students will be able to write exponential functions from tables, graphs, and word problems, determining the initial value and growth or decay factor from given situations.</p> <p>Lesson Overview:</p> <p>The lesson will begin with a review of the structure of an exponential equation, followed by guided practice with real-world applications such as population growth and depreciation. Students will then work through examples that require them to construct exponential equations based on different representations.</p>	<p>Academic Standards:</p> <p>HSF-LE.A.2 – Recognize that geometric sequences are exponential functions.</p>
Friday	Notes:	<p>Objective:</p> <p>Lesson Overview:</p> <p>No School- PD</p>	<p>Academic Standards:</p>