

ALGEBRA 2

Proficiency Scale: Exponents & Logarithms

Essential Learning Target: I can solve logarithmic & exponential equations and graph logarithmic and exponential functions.

Scoring Guidelines

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| 4.0 | <p>In addition to Score 3.0, in-depth inferences and applications that go beyond what was taught.</p> <ul style="list-style-type: none"> <input type="checkbox"/> I can write an exponential from a situation and apply it. | | | | | | | | | | | | | | | | | | | | |
| 3.0 | <p>The student will:</p> <ul style="list-style-type: none"> <input type="checkbox"/> I can graph an exponential and state all its key features. <input type="checkbox"/> I can solve an exponential or logarithmic equation. <p>The student exhibits no major errors or omissions.</p> | | | | | | | | | | | | | | | | | | | | |
| 2.0 | <p>There are no major errors or omissions regarding the simpler details and processes as the student:</p> <p>Recognizes or recalls specific terminology as:</p> <table border="0"> <tr> <td><input type="checkbox"/> Exponential Function</td> <td><input type="checkbox"/> X/Y-Intercepts</td> <td><input type="checkbox"/> Exponent</td> <td><input type="checkbox"/> Expand</td> </tr> <tr> <td><input type="checkbox"/> Logarithmic Function</td> <td><input type="checkbox"/> Asymptote</td> <td><input type="checkbox"/> Common Logarithm</td> <td><input type="checkbox"/> Condense</td> </tr> <tr> <td><input type="checkbox"/> Domain</td> <td><input type="checkbox"/> Exponential Growth</td> <td><input type="checkbox"/> Natural Log</td> <td><input type="checkbox"/> Product Property</td> </tr> <tr> <td><input type="checkbox"/> Range</td> <td><input type="checkbox"/> Exponential Decay</td> <td><input type="checkbox"/> ln(x)</td> <td><input type="checkbox"/> Power Property</td> </tr> <tr> <td><input type="checkbox"/> End Behavior</td> <td><input type="checkbox"/> Base</td> <td><input type="checkbox"/> e</td> <td><input type="checkbox"/> Change of Base</td> </tr> </table> <p>Performs basic processes, such as:</p> <ul style="list-style-type: none"> <input type="checkbox"/> I can identify the transformations of a given exponential or logarithmic function. <input type="checkbox"/> I can expand or condense a logarithmic expression using the properties of logarithms. <input type="checkbox"/> I can convert between logarithmic and exponential form. <input type="checkbox"/> I can solve an exponential equation by finding a <u>common base</u>. <input type="checkbox"/> I can write the equation of a function given its parent function and transformations. | <input type="checkbox"/> Exponential Function | <input type="checkbox"/> X/Y-Intercepts | <input type="checkbox"/> Exponent | <input type="checkbox"/> Expand | <input type="checkbox"/> Logarithmic Function | <input type="checkbox"/> Asymptote | <input type="checkbox"/> Common Logarithm | <input type="checkbox"/> Condense | <input type="checkbox"/> Domain | <input type="checkbox"/> Exponential Growth | <input type="checkbox"/> Natural Log | <input type="checkbox"/> Product Property | <input type="checkbox"/> Range | <input type="checkbox"/> Exponential Decay | <input type="checkbox"/> ln(x) | <input type="checkbox"/> Power Property | <input type="checkbox"/> End Behavior | <input type="checkbox"/> Base | <input type="checkbox"/> e | <input type="checkbox"/> Change of Base |
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