

# ALGEBRA 2

## Proficiency Scale: Rational Functions

**Essential Learning Target:** I can find all key features of a rational function and graph it with precision.

### Scoring Guidelines

<p>SCORE 4.0</p>	<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"> <li><input type="checkbox"/> I can find all key features of a <del>reciprocal</del> function <u>accurately (exact) and</u> sketch its graph, <del>and find its domain and range.</del></li> </ul>																
<p>SCORE 3.0</p>	<p>The student will:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> <u>simplify a complex fraction</u> <b>7.3</b></li> <li><input type="checkbox"/> I can find all key features of a <del>reciprocal</del> function, accurately sketch its graph, and find its domain and range. <b>7.5</b></li> <li><input type="checkbox"/> I can solve rational equations and check for extraneous solutions. <b>7.4</b></li> </ul> <p>The student exhibits no major errors or omissions.</p>																
<p>SCORE 2.0</p>	<p>There are no major errors or omissions regarding the simpler details and processes as the student: Recognizes or recalls specific terminology as:</p> <table border="0" style="width: 100%;"> <tr> <td><input type="checkbox"/> Denominator</td> <td><input type="checkbox"/> Vertical Asymptote</td> <td><input type="checkbox"/> x-intercept</td> <td><input type="checkbox"/> Rational</td> </tr> <tr> <td><input type="checkbox"/> Numerator</td> <td><input type="checkbox"/> Horizontal Asymptote</td> <td><input type="checkbox"/> y-intercept</td> <td><input type="checkbox"/> Reciprocal</td> </tr> <tr> <td><input type="checkbox"/> Reduce</td> <td><input type="checkbox"/> Hole</td> <td><input type="checkbox"/> Common Factor</td> <td><input type="checkbox"/> Unbounded</td> </tr> <tr> <td><input type="checkbox"/> Complex Fraction</td> <td></td> <td></td> <td></td> </tr> </table> <p>Performs basic processes, such as:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> I can simplify rational expressions. <b>7.1</b></li> <li><input type="checkbox"/> I can multiply or divide rational expressions. <b>7.1</b></li> <li><input type="checkbox"/> I can add and subtract rational expressions. <b>7.2</b></li> <li><input type="checkbox"/> I can graph <u>write the function given the transformations.</u> <b>7.5</b></li> </ul> <p style="text-align: right;"><b>review operations 7.4 (1-3)</b></p>	<input type="checkbox"/> Denominator	<input type="checkbox"/> Vertical Asymptote	<input type="checkbox"/> x-intercept	<input type="checkbox"/> Rational	<input type="checkbox"/> Numerator	<input type="checkbox"/> Horizontal Asymptote	<input type="checkbox"/> y-intercept	<input type="checkbox"/> Reciprocal	<input type="checkbox"/> Reduce	<input type="checkbox"/> Hole	<input type="checkbox"/> Common Factor	<input type="checkbox"/> Unbounded	<input type="checkbox"/> Complex Fraction			
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