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| **LG #** | **MCR07** | **Standards:** | **N-RN.1.1, N-RN.1.2, N-RN.2.3, N-Q.1.1, N-Q.1.2, N-Q.1.3** |
| **4.0** | **In addition to Score 3.0, in-depth inferences and applications that go beyond instruction to the standard.**  **The student will be able to:**   * Develop a method to simplify exponents when the outcome is not a rational number.   **No major errors or omissions regarding the score 4.0 content.** | | |
| **3.5** | In addition to 3.0, in-depth inferences and applications with partial success. | | |
| **3.0** | **Students will be able to use properties of rational exponents and apply properties of numbers to rational and irrational numbers**  **The student will be able to:**   * Rewrite expressions involving rational exponents using the properties of exponents (N-RN.1.2) * Rewrite expressions involving radicals using the properties of exponents (N-RN.1.2) * Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values (N-RN.1.1) * Use notation for radicals in terms of rational exponents. For example, (N-RN.1.1) * Convert and interpret units of measurement in multistep problems (dimensional analysis) and formulas (N-Q.1.1) * Interpret graphs, tables and word problems to define equations to represent real world context situations (N-Q.1.2) * Identify correct level of precision appropriate to limitations on units as it relates to real world measurement (significant digits) (N-Q.1.3)   **No major errors or omissions regarding the score 3.0 content (simple or complex).** | | |
| **2.5** | No major errors or omissions regarding 2.0 content and partial knowledge of 3.0 content. | | |
| **2.0** | **The student recognizes and describes specific terminology such as:**   |  |  |  | | --- | --- | --- | | * Rational Exponents | * Radicals | * Rational Number | | * Irrational Number | * Properties of Exponents | * Precision | |  |  |  |   **The student will be able to:**   * Explain why the sum or product of two rational numbers is rational (N-RN.2.3) * Explain that the sum of a rational number and an irrational number is irrational (N-RN.2.3) * Explain that the product of a nonzero rational number and an irrational number is irrational (N-RN.2.3) * Choose and interpret the scale and the origin in graphs and data displays (N-Q.1.1) | | |
| **1.5** | Partial knowledge of the score 2.0 content, but major errors or omissions regarding score 3.0 content. | | |
| **1.0** | With partial understanding of some of the simpler details and processes and some of the more complex ideas and processes. | | |
| **0.5** | With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes. | | |
| **0.0** | Even with help, no understanding or skill is demonstrated | | |