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| **LG #** | **801** | **Standards:** | **8.NS.1.1, 8.NS.1.2** |
| **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 and justify how to improve the accuracy of an approximation of an irrational for a given situation, including distinguishing when increased levels or precision would be necessary.

**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 rational approximations to compare and estimate expressions with irrational numbers.****The student will be able to:*** [Use rational approximations of irrational numbers to compare the size of irrational numbers. (8.NS.1.2)](http://www.cpalms.org/Public/PreviewResource/Preview/56089)
* [Locate rational approximations of irrational numbers on a number line.](http://www.cpalms.org/Public/PreviewResource/Preview/56087) ([8.NS.1.2](http://www.cpalms.org/Public/PreviewResource/Preview/56086))
* [Estimate the value of expressions involving irrational numbers. (8.NS.1.2)](http://www.cpalms.org/Public/PreviewResource/Preview/56093)

**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:**

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| --- | --- | --- |
| * Rational
 | * Approximation
 | * Integers
 |
| * Irrational
 | * Estimate
 | * Whole Numbers
 |
| * Terminating decimal
 | * Decimal expansion
 | * Natural Numbers
 |
| * Repeating decimal
 |  |  |

**The student will be able to:*** [Distinguish between rational and irrational numbers. (8.NS.1.1)](http://www.cpalms.org/Public/PreviewResource/Preview/56003)
* Understand informally that every number has a decimal expansion (8.NS.1.1)
* Represent rational numbers in [decimal](http://www.cpalms.org/Public/PreviewResource/Preview/56008) and [fraction](http://www.cpalms.org/Public/PreviewResource/Preview/56082) form (i.e. understand a decimal expansion which eventually repeats can be represented as a fraction). (8.NS.1.1)
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| **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 |