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| **LG #** | **802** | **Standards:** | **8.EE.1.1, 8.EE.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:*** Connect square and cube roots to geometry applications (i.e. the square root of the area is the length of the side of a square and a cube root of the volume is the length of the side of a cube.)

**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 work with radical and integer exponents.****The student will be able to:*** [Know and apply the properties of integer exponents to generate equivalent expressions.](http://www.cpalms.org/Public/PreviewResource/Preview/58533) ([8.EE.1.1](http://www.cpalms.org/Public/PreviewResource/Preview/59695))
* [Evaluate square and cube roots with whole number solutions. (8.EE.1.2)](http://www.cpalms.org/Public/PreviewResource/Preview/58622)
* [Solve equations involving square and cube roots using correct symbols.](http://www.cpalms.org/Public/PreviewResource/Preview/71078) ([8.EE.1.2](http://www.cpalms.org/Public/PreviewResource/Preview/59158))
* Recognize perfect squares and cubes, understanding that non-perfect squares and non-perfect cubes are irrational. (8.EE.1.2)
* Recognize that squaring a number and taking the square root of a number are inverse operations; likewise, cubing a number and taking the cube root are inverse operations. (8.EE.1.2)

**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:**

|  |  |  |
| --- | --- | --- |
| * Square root
 | * Cubic number
 | * Base
 |
| * Cube root
 | * Integer
 | * Associative property
 |
| * Square number (perfect square)
 | * Exponent
 | * Commutative property
 |

**The student will be able to:*** Write equivalent numerical expressions involving exponents. (8.EE.1.1)
* Distinguish between rational and irrational numbers. (8.NS.1.1 🡪 LG #801)
* [Use reasoning to determine between which two consecutive whole numbers a square root lies. (8.NS.1.1)](http://www.cpalms.org/Public/PreviewResource/Preview/56086)
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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 |