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| **LG #** | **AF02** | **Standards:** | **F-IF.3.7, F-IF.3.8a** |
| **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:*** Construct an even or odd function using translations, dilations and reflections from a given transformed function

**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 write functions in equivalent forms and graph functions with and without technology.****The student will be able to:*** Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions(F-IF.3.7)
* Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior (F-IF.3.7)
* Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior (F-IF.3.7)
* Graph trigonometric functions, showing period, midline, and amplitude (F-IF.3.7)
* Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function using the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph (F-IF.3.8a)
* Interpret zeros, extreme values, and symmetry of the graph in terms of a context (F-IF.3.8a)

**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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| * Linear
 | * Quadratic
 | * Square Root
 |
| * Cube Root
 | * Piece-wise
 | * Absolute Value
 |
| * Polynomial
 | * Rational
 | * Trigonometric
 |
| * Step Function
 | * Maxima
 | * Minima
 |
| * Intercepts
* Period
* Phase Shift
 | * Zeros
* Midline
* Vertical Displacement
 | * End Behavior
* Asymptotes
 |

**The student will be able to:*** Graph linear and quadratic functions and show intercepts, maxima, and minima (F-IF.3.7)
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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 |