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| **LG #** | **808** | **Standards:** | **8.F.2.4, 8.F.2.5** |
| **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:*** Interpret, analyze, and describe graphs of functions within interdisciplinary contexts (i.e. population growth, census data, global warming, etc.)

**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 functions to model relationships between quantities.****The student will be able to:*** Construct a function to model a linear relationship between two quantities given [a set of ordered pairs](http://www.cpalms.org/Public/PreviewResource/Preview/64508), [a graph](http://www.cpalms.org/Public/PreviewResource/Preview/64525), or [a table of values](http://www.cpalms.org/Public/PreviewResource/Preview/64599). (8.F.2.4)
* [Determine the rate of change and initial value of the function from a description of a relationship or from two ordered pairs, including identifying these from a table or from a graph. (8.F.2.4)](http://www.cpalms.org/Public/PreviewResource/Preview/64596)
* [Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values. (8.F.2.4)](http://www.cpalms.org/Public/PreviewResource/Preview/64603)
* [Describe qualitatively the functional relationship between two quantities by analyzing a graph (i.e. where the function is increasing or decreasing, linear or non-linear).](http://www.cpalms.org/Public/PreviewResource/Preview/68336) ([8.F.2.5](http://www.cpalms.org/Public/PreviewResource/Preview/64660))
* [Sketch a graph of a function that has been described verbally.](http://www.cpalms.org/Public/PreviewResource/Preview/64662) ([8.F.2.5](http://www.cpalms.org/Public/PreviewResource/Preview/64664))

**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:**

|  |  |  |
| --- | --- | --- |
| * Function
 | * Linear function
 | * Input/output
 |
| * Function rule
 | * Non-linear
 | * Independent variable
 |
| * Ordered pair (*x, y*)
 | * Rate of change/slope
 | * Dependent variable
 |
| * Initial value
 | * Increase/decrease
 |  |

**The student will be able to:*** Represent functions in multiple ways (numerically in tables, graphically, algebraically, and by verbal descriptions). (8.F.1.2 🡪 LG 807)
* Identify the graph of a straight line as having a constant rate of change. (8.EE.2.5 🡪 LG 804)
* Write a linear function rule for a given relationship. (8.F.2.4)
* Identify the type of function given a graph. (8.F.2.5)
 |
| **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 |