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| --- | --- | --- | --- |
| **LG #** | **A109** | **Standards:** | **F-IF.2.4, F-IF.2.5, F-IF.2.6** |
| **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:*** Assemble real world data, create an appropriate function to represent the data, and interpret the parameters in context.

**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 interpret functions that arise in applications in terms of the context.****The student will be able to:*** [Interpret in context, the key features of a given function.](http://www.cpalms.org/Public/PreviewResource/Preview/56659) ([F-IF.2.4](http://www.cpalms.org/Public/PreviewResource/Preview/59140))
 |
| * + Linear
	+ Quadratic
	+ Exponential
 | * + Piecewise
	+ Absolute Value
	+ Square and Cube Root
 |
| * [Sketch the graph](http://www.cpalms.org/Public/PreviewResource/Preview/56526) of a given function showing key features given a verbal description of the relationship. ([F-IF.2.4](http://www.cpalms.org/Public/PreviewResource/Preview/56658))
 |
| * + Linear
	+ Quadratic
	+ Exponential
 | * + Piecewise
	+ Absolute Value
	+ Square and Cube Root
 |
| * [Interpret slope of linear functions in real world context. (F-IF.2.6)](http://www.cpalms.org/Public/PreviewResource/Preview/56663)

**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:**

|  |  |  |
| --- | --- | --- |
| * Axis of Symmetry
 | * Intervals
 | * Maximum
 |
| * Minimum
 | * Rate of Change
 | * Slope
 |
| * Vertex
 | * Domain (Input)
 | * Range (Output)
 |
|  |   |  |

**The student will be able to:*** Identify the key features of a function (F-IF.2.4)
 |
| * + Intercepts
	+ Symmetries
	+ End behavior
 | * + Relative maximums and minimums
	+ Intervals where the function is increasing, decreasing, positive or negative
 |
| * [Relate the domain of a function to its graph](http://www.cpalms.org/Public/PreviewResource/Preview/60573) and, where applicable, to the quantitative relationship it describes. ([F-IF.2.5](http://www.cpalms.org/Public/PreviewResource/Preview/60618))
* [Estimate the rate of change of a function from its graph. (F-IF.2.6)](http://www.cpalms.org/Public/PreviewResource/Preview/56665)
* [Calculate the rate of change (slope) of a linear function from a graph or table over a specified interval.](http://www.cpalms.org/Public/PreviewResource/Preview/56664) ([F-IF.2.6](http://www.cpalms.org/Public/PreviewResource/Preview/59109))
 |
| **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 |