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| **LG #** | **G07** | **Standards:** | **G-GPE.2.4, G-GPE.2.5, G-GPE.2.6, G-GPE.2.7** |
| **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:*** Demonstrate how distance, midpoint, and slope can be used to determine the area and perimeter of a composite figure.

**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 coordinates to prove simple geometric theorems algebraically.****The student will be able to:*** Use coordinates to prove simple geometric theorems algebraically. For example, prove or disprove that a figure defined by given points in the coordinate plane is a specific [quadrilateral](http://www.cpalms.org/Public/PreviewResource/Preview/59180) or [triangle](http://www.cpalms.org/Public/PreviewResource/Preview/59181). ([G-GPE.2.4](http://www.cpalms.org/Public/PreviewResource/Preview/59184))
* Use coordinates to prove or disprove that a point lies on a circle, given the center and an additional point on the circle. (G-GPE.2.4)
* [Prove the slope criteria for parallel lines.](http://www.cpalms.org/Public/PreviewResource/Preview/71891) ([G-GPE.2.5](http://www.cpalms.org/Public/PreviewResource/Preview/72008))
* [Prove the slope criteria for perpendicular lines.](http://www.cpalms.org/Public/PreviewResource/Preview/72047) ([G-GPE.2.5](http://www.cpalms.org/Public/PreviewResource/Preview/72068))
* [Find the point on a directed line segment between two given points that partitions the segment in a given ratio.](http://www.cpalms.org/Public/PreviewResource/Preview/71103) ([G-GPE.2.6](http://www.cpalms.org/Public/PreviewResource/Preview/71108))
* Use coordinates to compute [perimeters of polygons](http://www.cpalms.org/Public/PreviewResource/Preview/55445) and areas of [triangles](http://www.cpalms.org/Public/PreviewResource/Preview/55448) and [rectangles](http://www.cpalms.org/Public/PreviewResource/Preview/55447), e.g., using the distance formula. ([G-GPE.2.7](http://www.cpalms.org/Public/PreviewResource/Preview/55449))

**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:**

|  |  |  |
| --- | --- | --- |
| * Coordinates
 | * Rectangle
 | * Circle
 |
| * Origin
 | * Slope
 | * Parallel Lines
 |
| * Perpendicular Lines
 | * Ratio
 | * Partition
 |
| * Polygon
 | * Area
 | * Triangle
 |

**The student will be able to:*** Use the slope criteria for parallel and perpendicular lines to solve geometric problems (e.g., find the equation of a line [parallel](http://www.cpalms.org/Public/PreviewResource/Preview/59185) or [perpendicular](http://www.cpalms.org/Public/PreviewResource/Preview/59186) to a given line that passes through a given point). (G-GPE.2.5)
* Use the slope, distance and midpoint formulas to find relationships of segments on the coordinate plane. (G-GPE.2.4) (G-GPE.2.5) (G-GPE.2.6) (G-GPE.2.7)
 |
| **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 |