|  |  |  |  |
| --- | --- | --- | --- |
| **LG #** | **G01** | **Standards:** | **G-CO.1.1, G-CO.1.2, G-CO.1.3, G-CO.1.4, G-CO.1.5** |
| **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:**   * Create equations of lines of reflection for regular polygons other than quadrilaterals. * Explain how the order in which a sequence of transformation is performed may result in different outcomes.   **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 experiment with transformations in the plane.**  **The student will be able to:**   * [Describe transformations as functions that take points in the plane as inputs and give other points as outputs. (G-CO.1.2)](http://www.cpalms.org/Public/PreviewResource/Preview/59164) * [Compare transformations that preserve distance and/or angle measure to those that do not (e.g., translation versus horizontal stretch). (G-CO.1.2)](http://www.cpalms.org/Public/PreviewResource/Preview/59166) * Describe the rotations and reflections that carry a [parallelogram](http://www.cpalms.org/Public/PreviewResource/Preview/59700) or [trapezoid](http://www.cpalms.org/Public/PreviewResource/Preview/56786) onto itself. (G-CO.1.3) * Develop definitions of [rotations](http://www.cpalms.org/Public/PreviewResource/Preview/70366), [reflections](http://www.cpalms.org/Public/PreviewResource/Preview/70371), and [translations](http://www.cpalms.org/Public/PreviewResource/Preview/70382) in terms of angles, circles, perpendicular lines, parallel lines, and line segments. (G-CO.1.4) * [Specify a sequence of transformations that will carry a given figure onto another.](http://www.cpalms.org/Public/PreviewResource/Preview/70570)  ([G-CO.1.5](http://www.cpalms.org/Public/PreviewResource/Preview/70536))   **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:**   |  |  |  | | --- | --- | --- | | * Angle | * Line Segment | * Circular Arc | | * Circle | * Point | * Transformation | | * Perpendicular Line | * Line | * Input | | * Parallel Line * Rectangle * Regular Polygon * Translations * Rotational Symmetry | * Distance * Parallelogram * Rotations * Plane * Sequence | * Output * Trapezoid * Reflections * Reflectional (line) Symmetry |   **The student will be able to:**   * Know definitions of [angle](http://www.cpalms.org/Public/PreviewResource/Preview/54956), [circle](http://www.cpalms.org/Public/PreviewResource/Preview/58091), [perpendicular lines](http://www.cpalms.org/Public/PreviewResource/Preview/55444), [parallel lines](http://www.cpalms.org/Public/PreviewResource/Preview/56751), and [line segment](http://www.cpalms.org/Public/PreviewResource/Preview/56752), based on the undefined notions of point, line, distance along a line, and distance around a circular arc. (G-CO.1.1) * Perform transformations ([translations](http://www.cpalms.org/Public/PreviewResource/Preview/59176), [reflections](http://www.cpalms.org/Public/PreviewResource/Preview/59162), and [rotations](http://www.cpalms.org/Public/PreviewResource/Preview/59161)) in the plane using various tools. (G-CO.1.2) * Describe the rotations and reflections that carry a [rectangle](http://www.cpalms.org/Public/PreviewResource/Preview/59699) or [regular polygon](http://www.cpalms.org/Public/PreviewResource/Preview/56787) onto itself. (G-CO.1.3) * Given a geometric figure and a [rotation](http://www.cpalms.org/Public/PreviewResource/Preview/70583), [reflection](http://www.cpalms.org/Public/PreviewResource/Preview/70551), or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software.  (G-CO.1.5) | | |
| **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 | | |