

| Common Core State Standards for Mathematics  |  |   |
|--|--|---|
| Domain: Expressing Geometric Properties with Equations                                       |  |   |
| Using Coordinates (use coordinates to prove simple geometric theorems algebraically) (G-GPE) |  |   |
| High School  |  |   |
| Score 4.0  | In addition to Score 3.0, in-depth inferences and applications that go beyond instruction to the standard. The student will:   | Example Activities  |
| 3.5  | In addition to score 3.0 performance, in-depth inferences and applications with partial success.   |   |
| Score 3.0  | <p><b>The student will:</b></p> <ul style="list-style-type: none"> <li>use the slope criteria of parallel and perpendicular lines to solve geometric problems (G-GPE.5)</li> <li>find the point on a directed line segment between two given points that partitions the segment in a given ratio (G-GPE.6)</li> <li>use coordinates to compute perimeters of polygons and areas of triangles and rectangles (G-GPE.7)</li> </ul> <p><b>The student exhibits no major errors or omissions.</b></p>  | <p><u>Perimeters of Polygons</u> – Students will be given multiple different polygons placed on the Cartesian Plane. The students will be required to work individually using the distance formula to determine the length of each side and ultimately the perimeter of each polygon. The teacher will circulate the room as the students work providing immediate and specific feedback to students. A student will get an accuracy check before moving to the next polygon.</p> |
| 2.5  | No major errors or omissions regarding 2.0 content and partial knowledge of the 3.0 content  |   |
| Score 2.0  | <p><b>There are no major errors or omissions regarding the simpler details and processes as the student will:</b></p> <ul style="list-style-type: none"> <li>recognize or recall specific vocabulary, such as: <ul style="list-style-type: none"> <li>○</li> </ul> </li> <li>perform basic processes, such as: <ul style="list-style-type: none"> <li>○ use coordinates to prove simple geometric theorems algebraically (G-GPE.4)</li> <li>○ prove the slope criteria for parallel and perpendicular lines (G-GPE.5)</li> </ul> </li> </ul> <p><b>However, the student exhibits major errors or omissions regarding the more complex ideas and processes.</b></p> | <p><u>Simultaneous Response Method</u> – Students will use a simultaneous response system (e.g., white boards, clickers, socrative) as the teacher displays two lines. The students will calculate the slope of each line to determine if the lines are parallel, perpendicular or neither. The teacher will provide immediate specific feedback to the students as they respond.</p>   |
| 1.5  | Partial knowledge of the 2.0 content but major errors or omissions regarding the 3.0 content   |   |
| Score 1.0  | <b>With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.</b>   |   |
| 0.5  | With help, a partial understanding of the 2.0 content but not the 3.0 content  |   |
| Score 0.0  | <b>Even with help, no understanding or skill demonstrated.</b>   |   |