Content Standard	**MAFS.6.G** *Geometry* **MAFS.6.G.1** *Solve real-world and mathematical problems involving area, surface area and volume* **MAFS.6.G.1.3** Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.
Assessment Limits	Can use rational numbers. Can use all four quadrants. When finding side length, limit polygons to traditional orientation (side lengths perpendicular to axes).
Calculator	No
Acceptable Response Mechanisms	Equation Response Graphic Response — Drawing Multiple Choice Response
Context	Allowable

Example	
Context	Konrad draws a shape. • Points spread across 2 quadrants. • Include a decimal value for one coordinate (either x or y coordinate). • Use 4 points.
Context easier	Use only whole numbers. All points located in 1 quadrant. Use 3- 4 points. Limit to shapes with vertical and horizontal lines or triangles.
Context more difficult	Use more than 4 points. Use a combination of whole numbers and decimals (more than one value is decimal). Points spread across 3-4 quadrants.

Sample Item Stem	Response Mechanism	Notes, Comments
A set of points is shown. (-5, 1), (-2, 1), (-5, 4), (-2, 4) Use the Connect Line tool to draw the quadrilateral created by the points.	Graphic Response — Drawing	
A set of points is shown. (-1, 2.5), (-2, -2), (-6, -4), (-4, 0) Use the Connect Line tool to draw the polygon created by the points.	Graphic Response — Drawing	

A set of points is shown. (5, 1.5), (0, 2.5), (-1.5, -6), (4, -3), (-4.5, 1.5) Use the Connect Line tool to draw the polygon created by the points.	Graphic Response — Drawing	
A set of points is shown. (5, 1.3), (5, -4), (2, 1.3), (2, -4) Conrad connects the points to a polygon. Which shape did he get? A. Rectangle B. Square C. Parallelogram D. Trapezoid	Multiple Choice Response	
Konrad draws a square. Two of its vertices are at (2, 7) and (6, 3). Use the Connect Line tool to draw Konrad's square on the coordinate grid.	Graphic Response — Drawing	
Konrad draws a parallelogram. Three of the vertices are located at (-6, 4), (-3, 1), and (5, 4). Use the Connect Line tool to draw the parallelogram.	Graphic Response- Drawing	
Konrad draws a quadrilateral with one pair of parallel sides. Two of the vertices are (3, 1) and (-5, -4). Use the Connect Line tool to draw Konrad's quadrilateral.	Graphic Response — Drawing	
Konrad draws a rectangle. • Two of the vertices are (2, 7) and (7, 7). • The perimeter of the rectangle is 16 units. Use the Connect Line tool to draw a possible rectangle that could be Konrad's.	Graphic Response — Drawing	.

Konrad has drawn a triangle on a coordinate grid. • One of the vertices is located at (-1, -2). • A second vertex has x-coordinate of 7 and a positive y-coordinate. • The area of the triangle is 20 square units. Use the Connect Line tool to draw a possible triangle that could be Konrad's.	Graphic Response — Drawing	