Geometry Unit 1 Study Guide Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Show all work**

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| 1. (G.CO.5) Which ***clockwise*** rotation about point *P* maps *C* to *E*? |
| 1. (G.CO.2) Which describes how could be rotated to form its image ? |
| 1. (G.CO.4) When the point (-3, 2) is reflected across the x-axis, what is the resulting image? |
| 1. (G.CO.4) What is the image of (-3, 2) when it is translated by (x – 1, y – 4) and then reflected about the y-axis? |
| 1. (G.CO.4) Trapezoid is the image of trapezoid . Explain the   Transformation that has taken place. |
| 1. (G.CO.5) Which of the following is **not** a rotation of the figure at the right? |
| 1. (G.CO.5) What type of transformation is shown in the diagram below? |
| 1. (G.CO.4) Which of the following capital letters does **not** have a line of symmetry?   A. **Z** B. **C** C. **O**  D. **A** |
| 1. (G.CO.4) Given the translation . What is the preimage of (3, 5)? |
| 1. (G.CO.2) The translation “5 units to the left and 3 units down” in coordinate notation would be ?   (x, y)→ ( , ) |
| 1. (G.CO.3) Use the figure at right to determine which segment represents a 225° counterclockwise rotation of  about P. |
| 1. (G.CO.4) If B(-2,-1) is reflected about the x-axis, then the coordinates of B’ are? |
| 1. (G.CO.4) Give an example of 2 figures that are **not** an isometry? |
| 1. (G.CO.2) What is the line of reflection for a transformation that maps (4, -3) to (-3, 4)? |
| 1. (G.CO.3) Which description of a rotation would map the figure below onto itself? |

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| 1. (G.CO.5) The coordinates of ∆𝐿𝑀𝑁 are L (-6,8), M (-4,2), N(-10,4) and is translated   What are the coordinates of the new figure?  𝐿′ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 𝑀′ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ N′ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. (G.CO.5) Reflect using the rule (x, y) 🡪 (x, -y).   What line did you reflect across? |
| 1. (G.CO.5) In the coordinate plane below, rotate 180 degrees about the origin.   What are the coordinates of the new figure? Graph and label the image.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Write an example of an even, odd, and neither function. 2. NEITHER: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. EVEN: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. ODD: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Determine if the given functions are even, odd, or neither. 2. f(x) = 4x2+ 6 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. f(x) = 9x \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
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| 1. (G.CO.5) Draw an example of a figure with a preimage in the 2nd quadrant, has reflected over the   x-axis, rotated 180 degrees and moved down by 3.  Image result for x, y coordinate graphs |

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| 1. (G.CO.5) List the sequence of transformations necessary to map to     **Transformation 1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Transformation 2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **Transformation 3: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |

**BONUS**

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| Solve for x. | Solve for y. | Solve for a. |