Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_

**2.4A Rotations\_Classwork (1)**

*OBJECTIVE: rotate the figures 90 degrees clockwise, 180 degrees, 270 degrees clockwise, 90 degrees counterclockwise about the origin. CCSS: 8.G.1, 2 and 3*

*Record the Pre-Image and Image coordinate pairs for each problem.*

**Rotate 90 degrees counterclockwise about the origin**

|  |  |  |
| --- | --- | --- |
| **1.**F F’G G’H H’ | **2.**J J’K K’L L’ | **3.**D D’E E’F F’G G’ |

**Do you notice a pattern? What happens to the coordinates of the Pre-Image when they are rotated about the origin?**

|  |
| --- |
| Your Finding: |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_’s Finding: RULE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_’s Finding: RULE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_’s Finding: RULE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_

**2.4A Rotations\_Classwork (2)**

*OBJECTIVE: rotate the figures 90 degrees clockwise, 180 degrees, 270 degrees clockwise, 90 degrees counterclockwise about the origin. CCSS: 8.G.1, 2 and 3*

*Record the Pre-Image and Image coordinate pairs for each problem.*

**Rotate 90 degrees clockwise about the origin**

|  |  |  |
| --- | --- | --- |
| **1.**S S’U U’T T’ | **2.**U U’W W’V V’ | **3.**L L’M M’N N’ |

**Do you notice a pattern? What happens to the coordinates of the Pre-Image when they are rotated about the origin?**

|  |
| --- |
| Your Finding: |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_’s Finding: RULE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_’s Finding: RULE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_’s Finding: RULE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_

**2.4A Rotations\_Classwork (3)**

*OBJECTIVE: rotate the figures 90 degrees clockwise, 180 degrees, 270 degrees clockwise, 90 degrees counterclockwise about the origin. CCSS: 8.G.1, 2 and 3*

*Record the Pre-Image and Image coordinate pairs for each problem.*

**Rotate 270 degrees clockwise about the origin**

|  |  |  |
| --- | --- | --- |
| **1.**B B’S S’L L’ | **2.**J J’K K’L L’ | **3.**D D’E E’F F’G G’ |

**Do you notice a pattern? What happens to the coordinates of the Pre-Image when they are rotated about the origin?**

|  |
| --- |
| Your Finding: |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_’s Finding: RULE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_’s Finding: RULE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_’s Finding: RULE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_

**2.4A Rotations\_Classwork (4)**

*OBJECTIVE: rotate the figures 90 degrees clockwise, 180 degrees, 270 degrees clockwise, 90 degrees counterclockwise about the origin. CCSS: 8.G.1, 2 and 3*

*Record the Pre-Image and Image coordinate pairs for each problem.*

**Rotate 180 degrees about the origin**

|  |  |  |
| --- | --- | --- |
| **1.**U U’V V’W W’ | **2.**T T’R R’S S’ | **3.**K K’L L’M M’N N’ |

**Do you notice a pattern? What happens to the coordinates of the Pre-Image when they are rotated about the origin?**

|  |
| --- |
| Your Finding: |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_’s Finding: RULE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_’s Finding: RULE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_’s Finding: RULE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Find the ordered pair after the designated rotation about the origin.

|  |  |  |
| --- | --- | --- |
| 1. Rotate A(3, -5) 90o clockwise about the originImage result for graph | 2. Rotate A(3, -5) 180o about the origin.Image result for graph | 3. Rotate A(3, -5) 90o counterclockwise about the origin.Image result for graph |
| 4. Rotate B(2, 4) 90o clockwise about the originImage result for graph | 5. Rotate B(2, 4) 180o about the origin.Image result for graph | 6. Rotate B(2, 4) 90o counterclockwise about the origin.Image result for graph |

WARM UP

|  |  |
| --- | --- |
| 1. A figure lies entirely in Quadrant IV. If you  reflect in the y-axis, in which quadrant is the  image? | 2. A figure lies entirely in Quadrant III. If you  reflect in the x-axis, in which quadrant is the  image? |

HW: (2.4A) p. 65 #2 – 5, 7 – 12, 30 – 33 (solutions on p. A14)

