|  |  |
| --- | --- |
| **Reflect Across *x*-axis** | **Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
|  |

|  |  |
| --- | --- |
| **Preimage** | **Reflected Image Across *x*-axis**  |
| **(-4, 1)** | (-4, -1) |
| **(3, -2)** |  |
| **(-2, -5)** |  |
| **(4, 5)** |  |
| **(0, 1)** |  |
| **(-3, 0)** |  |
|  |

1. Graph all of the Preimage points (in table above) on the graph.
2. Reflect all those points across the *x*-axis and write the reflected image in the table provided.
3. What pattern do you see that relates the Preimage points to the Reflected Image points?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_1. Create a rule that relates any point (*x, y*) to the reflection image across the *x*-axis.
 |
| **Reflect Across *y*-axis** | **Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
|  |

|  |  |
| --- | --- |
| **Preimage** | **Reflected Image Across *y*-axis**  |
| **(-4, 1)** | (-4, -1) |
| **(3, -2)** |  |
| **(-2, -5)** |  |
| **(4, 5)** |  |
| **(0, 1)** |  |
| **(-3, 0)** |  |
|  |

1. Graph all of the Preimage points (in table above) on the graph.
2. Reflect all those points across the *y*-axis and write the reflected image in the table provided.
3. What pattern do you see that relates the Preimage points to the Reflected Image points?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_1. Create a rule that relates any point (*x, y*) to the reflection image across the *y*-axis.
 |

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| **Reflect Across *y = x*** | **Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
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| --- | --- |
| **Preimage** | **Reflected Image Across *y = x***  |
| **(-4, 1)** | (-4, -1) |
| **(3, -2)** |  |
| **(-2, -5)** |  |
| **(4, 5)** |  |
| **(0, 1)** |  |
| **(-3, 0)** |  |
|  |

1. Graph all of the Preimage points (in table above) on the graph.
2. Draw the line represented by ***y* = *x***.
3. Reflect all those points across the *line* ***y = x*** and write the reflected image in the table provided.
4. What pattern do you see that relates the Preimage points to the Reflected Image points?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_1. Create a rule that relates any point (*x, y*) to the reflection image across the *line* ***y = x***.
 |
| **Reflect Across *y* = -x** | **Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
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| --- | --- |
| **Preimage** | **Reflected Image Across *y* = -x**  |
| **(-4, 1)** | (-4, -1) |
| **(3, -2)** |  |
| **(-2, -5)** |  |
| **(4, 5)** |  |
| **(0, 1)** |  |
| **(-3, 0)** |  |
|  |

1. Graph all of the Preimage points (in table above) on the graph.
2. Draw the line represented by ***y = -x****.*
3. Reflect all those points across the *line* ***y = -x*** and write the reflected image in the table provided.
4. What pattern do you see that relates the Preimage points to the Reflected Image points?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_1. Create a rule that relates any point (*x, y*) to the reflection image across the *line* ***y = -x***.
 |