Fill the Cartesian Plane

**Geometry**

**Unit 1 Line Master 4a**

* On the grid, draw and shade a rectangle made of two
grid squares. Label the vertices of the rectangle ABCD.
Record the coordinates of the vertices in the table.
* Take turns. Roll two number cubes. Use the numbers
on the cubes to translate rectangle ABCD. You decide
the directions of the translation. Translate and shade
the image rectangle.
* Record coordinates for each vertex of the image in the table using prime notation.
* Continue until rectangle ABCD can no longer be translated to unshaded squares. The person who makes the final translation wins.



 Fill the Cartesian Plane (cont’d)

**Geometry**

**Unit 1 Line Master 4b**

|  |  |  |
| --- | --- | --- |
| **Coordinates of the vertices of rectangle ABCD** | **Translations** | **Coordinates of the vertices of image rectangle A’B’C’D’** |
|  | **Horizontal****Left/right** | **Vertical****Up/down** |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

 Fill the Cartesian Plane (cont’d)

**Geometry**

**Unit 1 Line Master 4c**

|  |  |  |
| --- | --- | --- |
| **Coordinates of the vertices of rectangle ABCD** | **Translations** | **Coordinates of the vertices of image rectangle A’B’C’D’** |
|  | **Horizontal****Left/right** | **Vertical****Up/down** |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

 Fill the Cartesian Plane (cont’d)

**Geometry**

**Unit 1 Line Master 4d**

|  |  |  |
| --- | --- | --- |
| **Coordinates of the vertices of rectangle ABCD** | **Translations** | **Coordinates of the vertices of image rectangle A’B’C’D’** |
|  | **Horizontal****Left/right** | **Vertical****Up/down** |  |
|  |  |  |  |
|  |  |  |  |
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|  |  |  |  |