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Geometry
Unit 1 Line Master 4a

## Fill the Cartesian Plane

- 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.

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Geometry
Unit 1 Line Master 4b

Fill the Cartesian Plane (cont'd)

| Coordinates of <br> the vertices of <br> rectangle ABCD | Translations |  | Coordinates of <br> the vertices of <br> image rectangle <br> $A^{\prime} B^{\prime} C^{\prime} D^{\prime}$ |
| :--- | :--- | :--- | :--- |
|  |  | Horizontal <br> Left/right | Vertical <br> Up/down |
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Geometry
Unit 1 Line Master 4c

Fill the Cartesian Plane (cont'd)

| Coordinates of <br> the vertices of <br> rectangle ABCD | Translations |  | Coordinates of <br> the vertices of <br> image rectangle <br> $A^{\prime} B^{\prime} C^{\prime} D^{\prime}$ |
| :--- | :--- | :--- | :--- |
|  |  | Horizontal <br> Left/right | Vertical <br> Up/down |
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Geometry
Unit 1 Line Master 4d

Fill the Cartesian Plane (cont'd)

| Coordinates of <br> the vertices of <br> rectangle ABCD | Translations |  | Coordinates of <br> the vertices of <br> image rectangle <br> $A^{\prime} B^{\prime} C^{\prime} D^{\prime}$ |
| :--- | :--- | :--- | :--- |
|  |  | Horizontal <br> Left/right | Vertical <br> Up/down |
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