



Reporting Measure: Rectangular Arrays

Level	Description
<p>Above & Beyond (4.0)</p>	<ul style="list-style-type: none"> • I can break up a large rectangular array into smaller parts to make it easier to count the number of cells in it (for example, when someone gives me a rectangular array that has 13 rows and 9 columns, I can divide it into smaller parts, count the cells or objects in each smaller part, then add them all up to figure out how many cells are in the whole array).
<p>3.5</p>	<p>I can do all of the things at level 3.0, and I can do some of the things at level 4.0.</p>
<p>Proficient (3.0)</p>	<p>RA1—I can divide a rectangle into rows and columns of same-size cells (for example, I can divide a rectangle into 4 rows and 5 columns of same-size cells).</p> <p>RA2—I can use addition to find the total number of cells in a rectangular array (for example, when someone gives me a rectangular array with 5 rows and 3 columns, I know that I can use the expressions $5 + 5 + 5$ or $3 + 3 + 3 + 3 + 3$ to find the total number of cells in the array).</p>
<p>2.5</p>	<p>I can do all of the things at level 2.0, and I can do some of the things at level 3.0.</p>
<p>Getting There (2.0)</p>	<p>RA1—I know what certain words mean (for example, <i>array, cell, column, rectangle, right angle, row, side, square, square angle</i>) and can do things such as:</p> <ul style="list-style-type: none"> • Identify rectangles and squares. • Finish dividing up a rectangle into same-size squares when someone gives me one that is only partially finished. • Divide a rectangle into same-size squares. For example, when someone gives me a rectangle and a set of paper same-size squares, I can cover the rectangle with the squares so that there are no gaps or overlaps and count how many squares it took. • Explain that when a rectangle is divided into smaller same-size squares or rectangles, the squares or rectangles will line up perfectly with each other up-and-down and side-to-side. • Say how many same-size squares or rectangles are in a rectangle that has been divided up by describing it in terms of rows and columns. For example, when someone gives me a rectangle that has been divided up into squares that are stacked 3 high and 5 across, I can trace the rows of squares and say that the rectangle has been divided into 3 rows of 5 squares each. • Divide a line segment into a specific number of same-size parts. • Divide a rectangle into a specific number of same-size rows or columns. For example, when someone gives me a rectangle, I can divide it into 5 same-size columns. <p>RA2—I know what certain words mean (for example, <i>addend, cell, column, equal groups, equation, rectangular array, row, skip count, sum</i>) and can do things such as:</p> <ul style="list-style-type: none"> • Pick out the parts of a rectangular array, like its rows, columns, and cells. • Explain that the rows and columns of cells in a rectangular array are like equal groups. For example, when someone gives me a rectangular array with 4 rows and 5 columns, I can say that the array has 4 equal groups of 5 cells or 5 equal groups of 4 cells. • Explain that I can count the number of cells in a rectangular array by skip counting by the number of rows or columns it has. For example, when someone gives me an array with 4 rows and 5 columns, I can explain that I could count the number of cells in the array by skip counting by 4 five times or skip counting by 5 four times.

	<ul style="list-style-type: none"> • Explain that I can count the number of cells in a rectangular array by adding the number of cells in its rows or columns. For example, when someone gives me an array with 4 rows and 5 columns, I can explain that I could count the number of cells in the array by adding five 4s together or by adding four 5s together. • Write an addition equation that shows the number of cells in a rectangular array. For example, when someone gives me an array with 4 rows and 5 columns, I can write the equations $4 + 4 + 4 + 4 + 4 = \square$ or $5 + 5 + 5 + 5 = \square$ to show how many cells are in the array. • Explain that adding together the number of cells in each row of an array or adding together the number of cells in each column will both make the same sum For example, when someone gives me an array with 4 rows and 5 columns, I can explain that adding the number of total cells as $4 + 4 + 4 + 4 + 4$ or as $5 + 5 + 5 + 5$ will both make the same sum.
1.5	I can do some of the things at level 2.0 and at level 3.0.
Beginning (1.0)	I can do some of the things at level 2.0 and at level 3.0 with help.