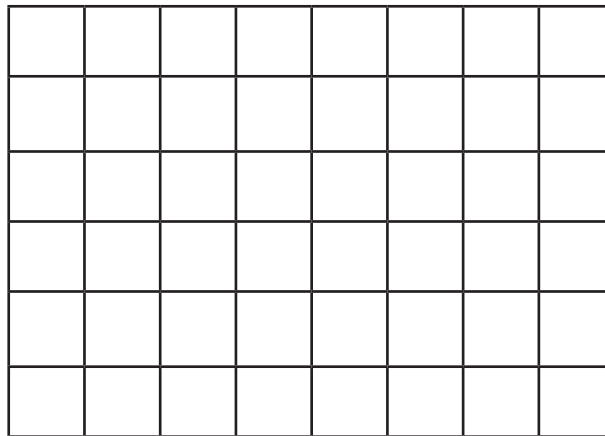


4.4 Connecting Iterated Squares and Multiplication as Ways to Find Area

Use square unit tiles to solve each problem below. Then sketch the array. Then explore how the arrangement of the unit tiles and the idea of multiplication are similar to one another. What do you notice? What do you wonder?

1. Allison was helping her mom make brownies. They cut the brownies into 4 rows with 6 brownies in each row. How many brownies did they have when they were finished.

Sketch the array:

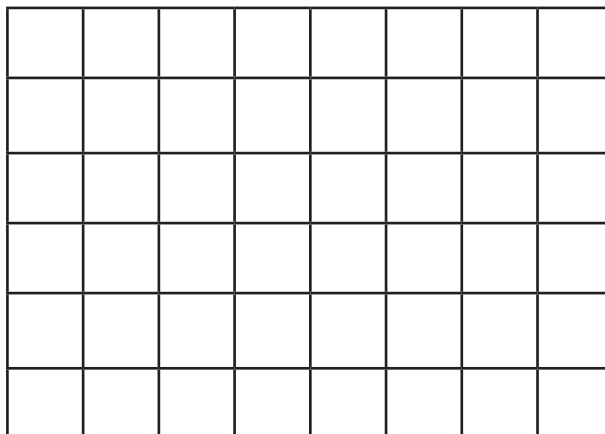


How might you use addition to describe this array? How might you use multiplication to describe this array?

How is the relationship between the number of rows and the number of unit tiles in each row similar to multiplication?

2. Bryan and his teacher were putting carpet squares on the floor for group time. One section had 4 rows with 4 carpet squares each.

Sketch the array:

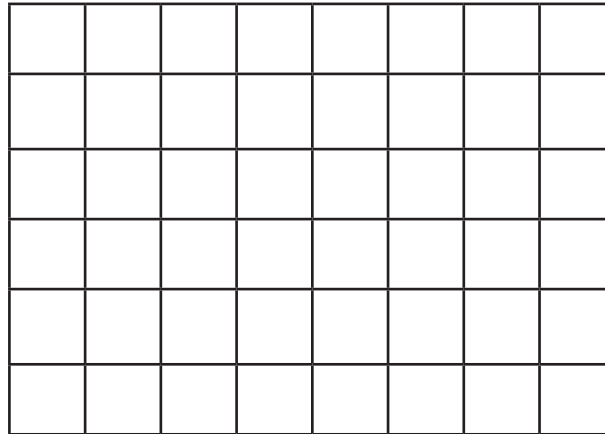


How might you use addition to describe this array? How might you use multiplication to describe this array?

How is the relationship between the number of rows and the number of unit tiles in each row similar to multiplication?

3. Tanisha and her mom were making an art project with paper squares. One canvas had 3 rows with 4 paper squares in each row.

Sketch the array:



How might you use addition to describe this array? How might you use multiplication to describe this array?

How is the relationship between the number of rows and the number of unit tiles in each row similar to multiplication?