Grade 3 – Math

This task requires students to use their understanding of the four operations to solve a real-world problem, first by adding to determine a total number of tiles and then determining how those tiles can be displayed in a rectangular array on a 10 x 10 grid.

QUESTION:

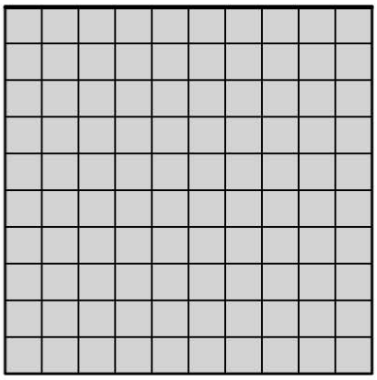
An art teacher will tile a section of the wall with painted tiles made by students in three art classes.

- Class A made 18 tiles.
- Class B made 14 tiles.
- Class C made 16 tiles.

Part A: What is the total number of tiles that are to be used?

	tiles

Part B: The grid shows how much wall space the art teacher can use. Use the grid to create a rectangular array showing how the art teacher might arrange tiles on the wall. Select the boxes to shade them. Each tile should be shown by one shaded box.



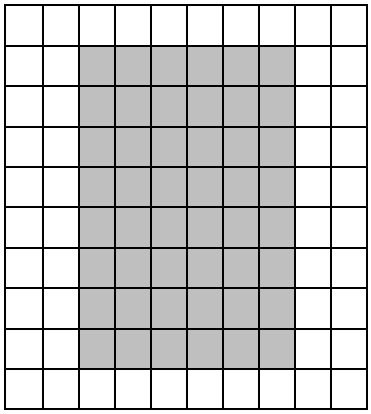
Part C: Andy created a rectangular array showing how he would place 56 small tiles on the wall. He placed 7 tiles in each row. He wrote a multiplication equation using *R* to stand for the number of rows he used.

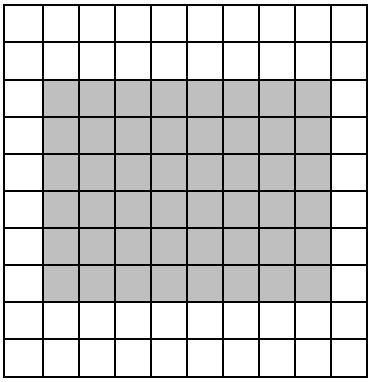
Write an equation using *R* that Andy could have written.

ANSWER:

Part A: The total number of tiles is 48 tiles.

Part B: Create a rectangular array using the provided model that is 6 boxes wide and 8 boxes tall (or 8 boxes wide and 6 boxes tall). For example, here are two of the many possible solutions:





Part C: Correct equations using R:

7 x R = 56 – or – R x 7 = 56 – or – 56 = R x 7 – or – 56 = 7 x R