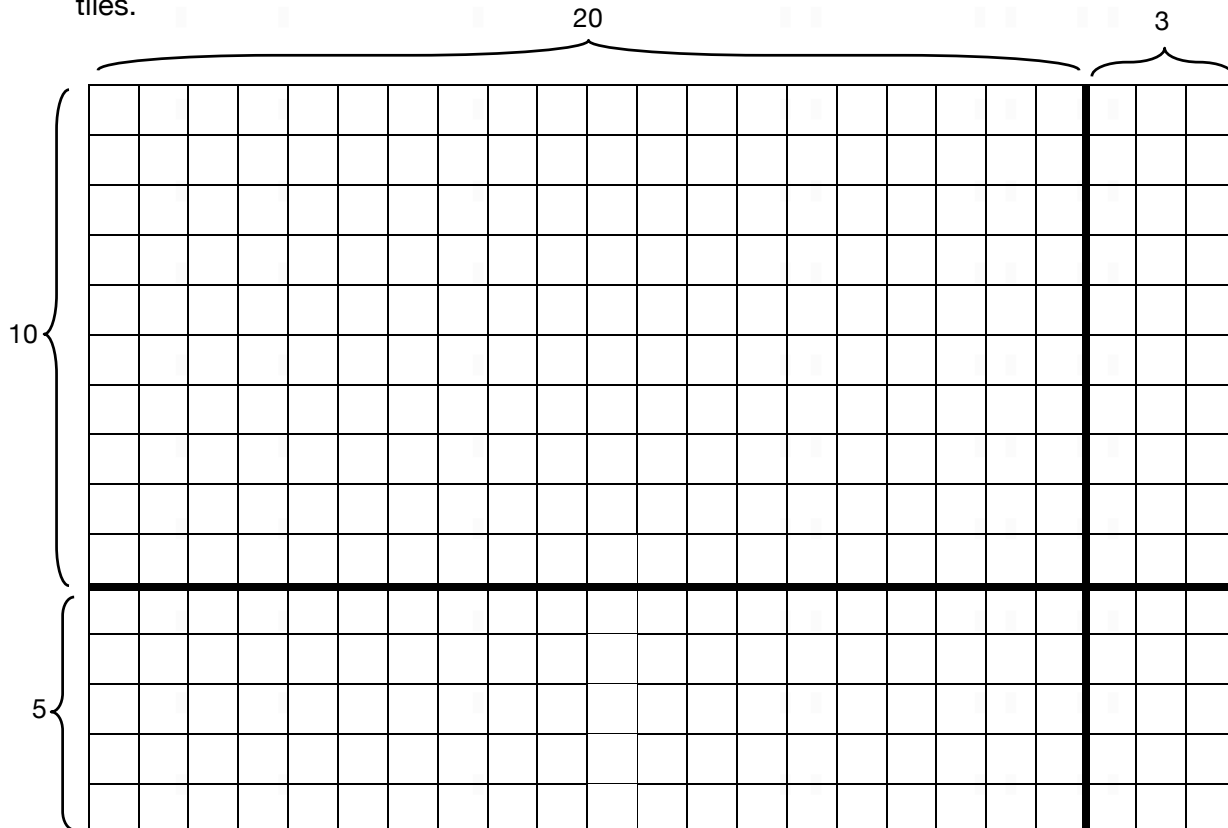**PROBLEM SOLVED**

MAKING SENSE OF MATHEMATICS

1. Landon is planning to install vinyl tile in his kitchen and dining area. Each tile is one square foot and he needs enough tiles to cover a floor that measures 15 feet by 23 feet. How many tiles does Landon need to purchase? The following grid represents Landon's floor. Determine the number of tiles it will take to cover each section of the floor and add the results to find the total number of tiles.

Now solve the problem using the paper-and-pencil procedure. Use the model to explain why your answer is correct.

MakingSense

Draw an area model to help you solve each of the following problems. You may want to draw a sketch on grid paper. Then record each step you used to solve the problem with paper and pencil.

2. Lydia has piece of poster board that measures 22 inches by 28 inches. What is the area of the poster in square inches?

3. Pat, a drummer in his college band, plans to march in the homecoming parade. If the entire band performs, they will march in 13 rows with 24 members in each row. How many members are in the band?

4. Shelby babysits each Saturday afternoon. Last week she earned $16. Her older brother, Ethan, is a waiter and works every Friday and Saturday evening. Last week he earned 12 times as much money as Shelby. How much money did Ethan make?

5. Mariah needs a piece of fabric that measures 37 inches by 25 inches to put on the back of a quilted wall hanging she is making. What is the area of the piece of fabric?