K-PREP

Sample Items

2012

Mathematics Grade 5

1

At a grocery store, 3 employees each stacked 58 cans of peas and 64 cans of corn on a shelf, as represented by this expression.
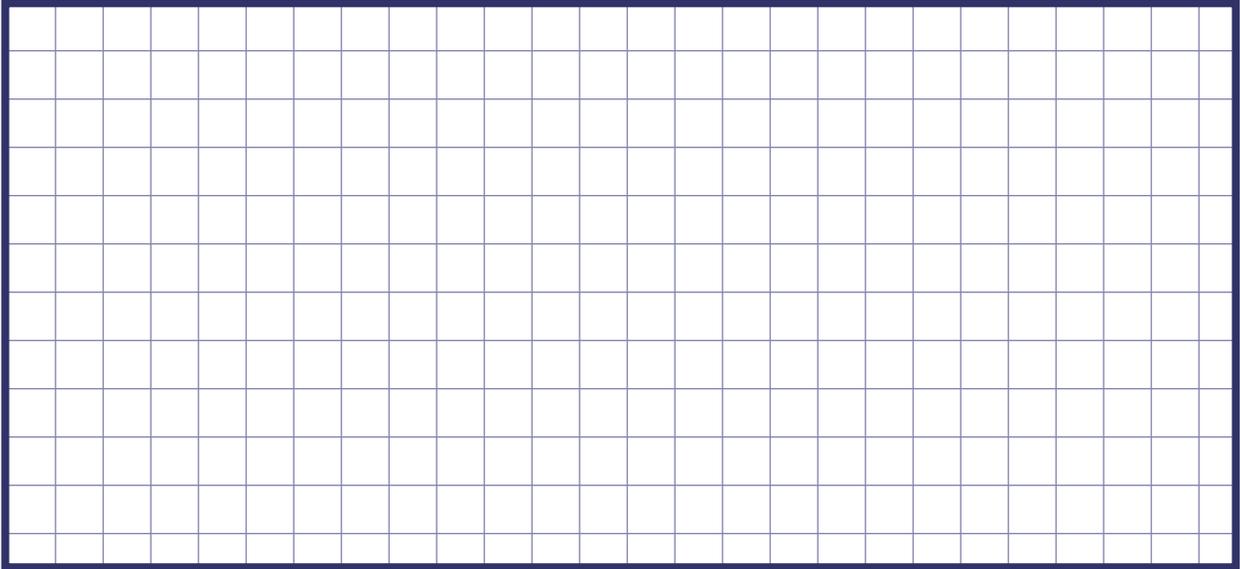
$$(3 \times 58) + (3 \times 64)$$

Part A Using only addition symbols, write an equivalent expression to the one above.

Part B How do you know the equation you wrote in part A is equivalent to the expression above? Explain your thinking.
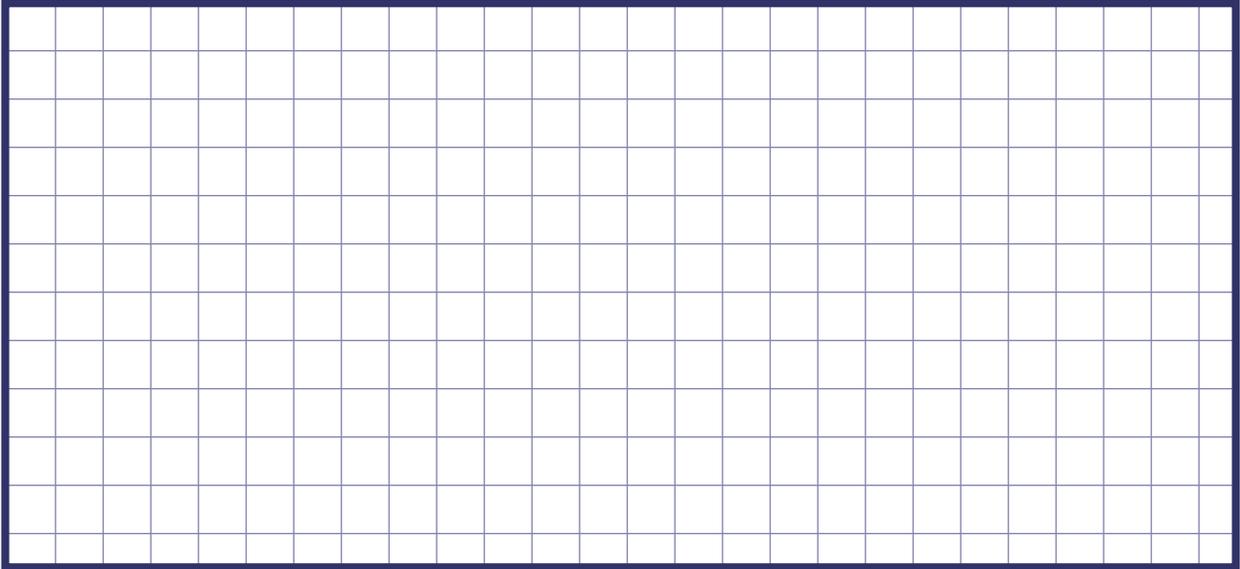
Mathematics

2
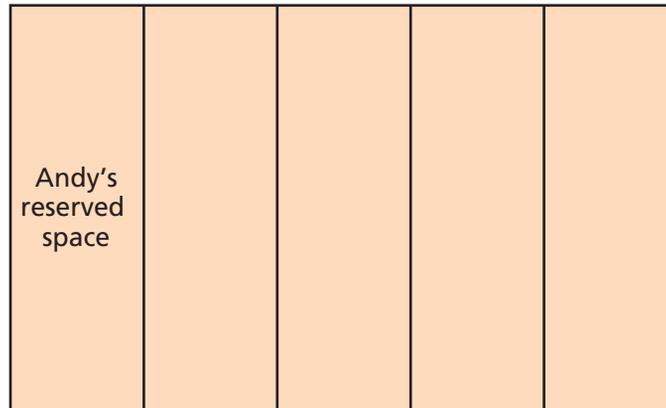
Describe the relationship between the value of $(126 + 9)$ and $(126 + 9) \div 2$.

Mathematics

The diagram below shows the area of the cafeteria floor space that was used for a craft show. Andy reserved $\frac{1}{5}$ of the cafeteria floor space to display his crafts.

Cafeteria Floor Space

Andy divided his reserved space into 4 equal parts and displayed his paintings, woodworking, metalwork, and clay each in a different spot.

> **Part A** What fraction of the cafeteria floor space did Andy use for paintings? Explain how to check your answer using multiplication. Show your work.

The next time Andy set up his craft display in the cafeteria he was given $\frac{1}{3}$ of the cafeteria floor space. He divided his reserved space into 4 equal parts so he could display his paintings, woodworking, metalwork, and clay in different spots.

> **Part B** What fraction of the cafeteria floor space did Andy use for paintings? Show your work.
>
> **Part C** Use a visual fraction model to show the fraction of the cafeteria floor space that you determined Andy used to display his paintings in **part B**.

Mathematics

Do not write outside this box.