

**Multiply Matrices by Scalars to Produce New Matrices - Guided Lesson
Explanation****Explanation#1**

The original matrix must be multiplied in order to fill in the missing number.

$$4 \begin{bmatrix} 2 \\ 4 \end{bmatrix} = \begin{bmatrix} 8 \\ 16 \end{bmatrix} \text{ the missing number is } 4(4), \text{ which is } 16.$$

Explanation#2

Multiply the original matrix to fill in the missing number.

$$5 \begin{bmatrix} 5 \\ 8 \end{bmatrix} = \begin{bmatrix} 25 \\ 40 \end{bmatrix} \text{ the missing number is } 5(8), \text{ which is } 40.$$

Explanation#3

Take the product of 6 and 8 to find the missing number and fill in the column in the second matrix.

$$6 \begin{bmatrix} 4 \\ 8 \end{bmatrix} = \begin{bmatrix} 24 \\ 48 \end{bmatrix} \text{ the missing number is } 6(8), \text{ which is } 48.$$

