

Name _____

Date _____

Decimal Multiplication - Guided Lesson Explanation**Explanation#1**

Starting the right, multiply each digit in the top number by each digit in the bottom number, just as with whole numbers. Then we will add the products.

$$\begin{array}{r} 6.115 \\ \times 900 \\ \hline 0000 \\ 0000x \\ 55035xx \\ \hline 5503500 \end{array}$$

Now we will place the decimal point in the answer by starting at the right and moving a number of places equal to the sum of the decimal places in both numbers multiplied. Then it will be 5503.500

So, the answer is 5503.5.

Explanation#2

Step 1) We have to multiply the numbers just as if they are whole numbers.

$$\begin{array}{r} 6044.7 \\ \times 225.6 \\ \hline \end{array}$$

Step 2) We will line up the numbers on the right. After that, starting the right, multiply each digit in the top number by each digit in the bottom number, just as with whole numbers. Then we will add the products.

$$\begin{array}{r} 6044.7 \\ \times 225.6 \\ \hline 362682 \\ 302235x \\ \hline 120894xx \end{array}$$



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120894xxx

136368432

Step 3) Now we will place the decimal point in the answer by starting at the right and moving a number of places equal to the sum of the decimal places in both numbers multiplied. Then it will be 1363684.32

So, the answer is 1363684.32.

Explanation#3

Step 1) We have to multiply the numbers just as if they are whole numbers.

$$8300.2 \times 600$$

Step 2) Starting the right, multiply each digit in the top number by each digit in the bottom number, just as with whole numbers. Then we will add the products.

$$\begin{array}{r} 8300.2 \\ \times 600 \\ \hline 0000 \\ 0000x \\ \hline 4980120x \\ 49801200 \end{array}$$

Step 3) Now we will place the decimal point in the answer by starting at the right and moving a number of places equal to the sum of the decimal places in both numbers multiplied. Then it will be 49801200.

So, the answer is 4980120.0 or 4,980,120.

