

Topic 2.2: Multiply Decimals Numbers

When multiplying decimal numbers, you can estimate a product using **front end estimation** or **relative size estimation**.

When you use your calculator, your estimate should confirm the answer as reasonable.

When you multiply decimal numbers without the use of a calculator, approach it the same way you would with whole numbers.

1. Multiply the digit in the "ones" place value (bottom number) by every digit in the top number.
2. Then multiply the digit in the tens place value (bottom number) by every digit in the top number. DO NOT FORGET TO ADD A ZERO TO START!
3. Add your two lines of work. Make sure to regroup as necessary.
4. Now, count the number of digits behind each decimal in both factors. Total them up. This is the amount of places behind the decimal in our solution.

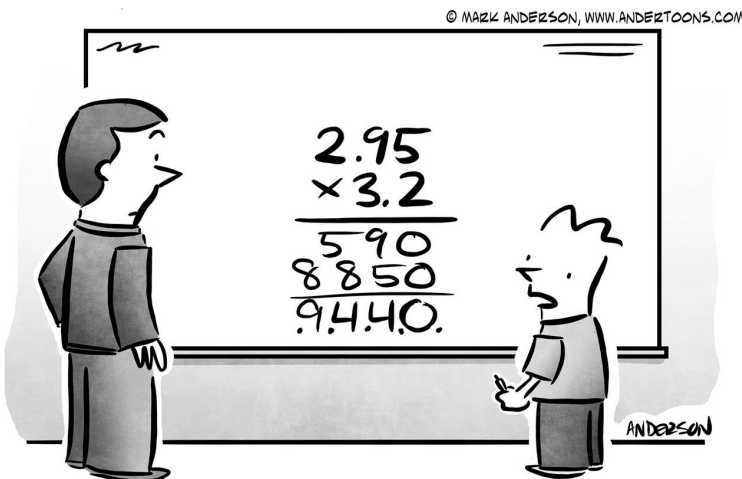
$$\begin{array}{r} 6.34 \\ \times 4.7 \\ \hline 4438 \\ 25360 \\ \hline 29.798 \end{array}$$

- Remember to add the zero!
- There are three decimal places after the decimals above, so we will add the decimal after skipping three places.

Product:

The solution when you multiply two or more numbers.

THIS IS A DIFFICULT CONCEPT TO UNDERSTAND THROUGH WRITTEN NOTES. IT IS SUGGESTED THAT YOU COME IN AND SEE MR. OHM FOR ONE ON ONE SUPPORT TO BETTER UNDERSTAND THE MULTIPLICATION METHOD.



"I forgot where to put the decimal, so I figured I'd cover all the bases."