

Multiplication of Decimals

Unit: 41

Release: 1.0

Math Checkup

To multiply decimals, perform the multiplication just as you would for whole numbers, and ignore the decimal point. Once you have the product, place a decimal point in the product so that there are as many digits after the decimal point as there are in both the multiplier and multiplicand.

To multiply a decimal number by a power of 10, just move the decimal point to the right for as many digits as there are zeros in the multiplier.

Example: Compute 2.67×3.4

$$\begin{array}{r} 8.62 \leftarrow 2 \text{ decimal places} \\ \times 4.5 \leftarrow 1 \text{ decimal place} \\ \hline 4310 \\ 3448 \\ \hline 38790 \leftarrow 3 \text{ decimal places} \\ 38.790 = 38.79 \end{array}$$

Answer = 38.79

Example: Compute 34.67×1000

- You have to move the decimal point to the right by 3 digits. Since 34.67 has only 2 digits to the right of the decimal point, you pad it with an extra zero. So, $34.67 = 34.670$
- Now, move the decimal point to the right by 3 digits:

$$34.67 \times 1000 = 34.670 \times 1000 = 34670. = 34,670$$