

Multiplying decimals by whole numbers

To multiply a decimal number by a whole number, follow these steps:

1. **Multiply** as you would with whole numbers.
2. Count the total number of decimal places in your factors.
3. Move the decimal point in the product one place to the left for each decimal place you counted.

Multiplying decimals by 1-digit whole numbers

Let's try it with 8.3×4 .

First, multiply as you would with whole numbers.

$$\begin{array}{r} 8.3 \\ \times 4 \\ \hline 332 \end{array}$$

Now, place the decimal point in your product. Count the number of decimal places in your factors.

8.3 has **1** decimal place. So, move the decimal point **1** place to the left in your product.

$$\begin{array}{r} 8.3 \\ \times 4 \\ \hline 33.2 \end{array}$$

So, $8.3 \times 4 = 33.2$!

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Multiply:

$$0.8 \times 1 = \boxed{}$$



Multiply a decimal by a one-digit whole number XNY

Multiplying decimals by 2-digit whole numbers

Let's try it with 0.14×23 .

First, multiply as you would with whole numbers.

$$\begin{array}{r} 0.14 \\ \times 23 \\ \hline 42 \\ +280 \\ \hline \mathbf{322} \end{array}$$

Now, place the decimal point in your product. Count the number of decimal places in your factors.

0.14 has 2 decimal places. So, move the decimal point 2 places to the left in your product.

$$\begin{array}{r} 0.14 \\ \times 23 \\ \hline 42 \\ +280 \\ \hline \mathbf{3.22} \end{array}$$

So, $0.14 \times 23 = 3.22$!

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Multiply:

$$0.1 \times 745 = \boxed{}$$



Multiply a decimal by a multi-digit whole number PGM

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Multiply a decimal by a multi-digit whole number PGM

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Multiplying decimals

Multiplying decimals by powers of 10