

How do you multiply decimals?

Example

$$0.8 \times 65.4$$

Step 1 - Change the decimals to whole numbers.

$$\begin{array}{r} 654 \\ \times 8 \\ \hline 5232 \end{array}$$

Step 2 - Estimate the product by rounding each factor to the nearest whole number or benchmark fraction/decimal ($\frac{1}{2}$, 0.5). $0.8 \approx 1$ and $65.4 \approx 65$

$$1 \times 65 = 65$$

Step 3 - Insert a decimal into the product in step 1 that is closest to the estimate in step 2.

52.32 is the closest decimal to 65. Therefore $0.8 \times 65.4 = 52.32$