Lesson 3.8 Multiplying Decimals Using Rules

When multiplying decimals, count the number of decimal places in each factor to figure out the placement of the decimal point in the product.

$$
\begin{array}{r} 3 \\ \times\ 5 \\ \hline 15 \end{array}
\qquad
\begin{array}{r} 0.\underline{3} \\ \times\ \ 5 \\ \hline 1.5 \end{array}
\qquad
\begin{array}{r} 0.\underline{3} \\ \times\ 0.\underline{5} \\ \hline 0.15 \end{array}
\qquad
\begin{array}{r} 0.\underline{3} \\ \times\ 0.\underline{05} \\ \hline 0.015 \end{array}
$$

0 decimal places   1 decimal place   2 decimal places   3 decimal places

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How many decimal places will be in the product of the following multiplication problems?

	a	b	c
1.	3.25×4.2	6.3×9.8	5.6×8.2
	_____	_____	_____
2.	5.3×7	9.35×8.43	2.8×7.46
	_____	_____	_____

Multiply to find the answer. Underline the decimal places in the factors and in the product.

	a	b	c	d
3.	$\begin{array}{r}5.44 \\ \times\ 901.02 \\ \hline \end{array}$	$\begin{array}{r}25.9 \\ \times\ 47.6 \\ \hline \end{array}$	$\begin{array}{r}291.23 \\ \times\ \ \ 4.34 \\ \hline \end{array}$	$\begin{array}{r}3.08 \\ \times\ 608.8 \\ \hline \end{array}$
4.	$\begin{array}{r}908.01 \\ \times\ \ \ \ 4.11 \\ \hline \end{array}$	$\begin{array}{r}92.5 \\ \times\ 50.7 \\ \hline \end{array}$	$\begin{array}{r}901.3 \\ \times\ \ \ 8.2 \\ \hline \end{array}$	$\begin{array}{r}11.4 \\ \times\ 22.4 \\ \hline \end{array}$