

Name: _____

Period: _____

Date: _____

Math Unit 2: Fractions and Decimals**Lesson 2.5-Multiplying Decimals****SWBAT:****Paraphrase:****Essential Question:** How can you multiply decimals?

Example 1

6.2×3.9

Method 1Estimate first

Step 1

$6.2 \rightarrow 6$

$3.9 \rightarrow 4$

 $6 \times 4 = 24$, so you know the product needs to be close to 24.

Step 2

Multiply as if there were no decimal points.

$$\begin{array}{r}
 6.2 \\
 \times 3.9 \\
 \hline
 558 \\
 + 1860 \\
 \hline
 2418
 \end{array}$$

Step 3

Put the decimal point back where it makes sense. Use your estimate to help.
 $6 \times 4 = 24$, so 6.2×3.9 must be close to 24

.2418? 2.418? 24.18? 241.8?

Your Turn

$$\begin{array}{r}
 4.8 \\
 \times 7.2 \\
 \hline
 \end{array}$$

Estimate:

$4.8 \rightarrow$

$7.2 \rightarrow$

Example 2	0.453 x 2.8
<u>Method 2</u>	<u>Count the decimal places.</u>
Step 1	0.453= 3 decimal places 2.8 =1 decimals place 3 + 1 = 4, so the product needs to have 4 decimal places
Step 2	Multiply as if there were no decimal points. 0.453 → 3 decimal places <u>x 2.8</u> → 1 decimal place 3624 <u>+ 9060</u> 12684 → 4 decimal places
Step 3	Put the decimal point back in. Count the number of places you found in step 1. Since we counted 4 decimal places, we need to have 4 places in our product. 12684 = 1.2684
Your Turn	5.27 → __ decimal places <u>x 0.9</u> → __ decimal place → __ decimal places
Notes / Questions	

Let's Practice

$\begin{array}{r} 1) \ 5.91 \\ \times \ 4 \\ \hline \end{array}$	$\begin{array}{r} 2) \ 0.016 \\ \times \ 3 \\ \hline \end{array}$	$\begin{array}{r} 3) \ 8.1 \\ \times 5.6 \\ \hline \end{array}$	$\begin{array}{r} 4) \ 9.04 \\ \times 2.7 \\ \hline \end{array}$
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5) Apples cost \$1.57 per pound. You buy 2.3 pounds of apples. How much do you spend on apples?