

# Rules for Multiplication

1. Line up your numbers with the last digits under each other.
2. Multiply as you would with whole numbers.
3. Add the decimal places in each of the numbers being multiplied.
4. Move the decimal point to the left the **TOTAL** number of places in the numbers being multiplied.

# Rules for Multiplication - Example

1. Line up your numbers with the last digits under each other.

$$\begin{array}{r} 12.3 \\ \times 6.11 \\ \hline \end{array}$$

# Rules for Multiplication - Example

2. Multiply as you would with whole numbers.

$$\begin{array}{r} \phantom{x} \phantom{1} 2.3 \\ x \phantom{1} 6.1 1 \\ \hline \phantom{+} \phantom{1} 2 3 \\ \phantom{+} 1 2 3 0 \\ + 7 3 8 0 0 \\ \hline 7 5 1 5 3 \end{array}$$




# Rules for Multiplication - Example

3. Add the decimal places in each of the numbers being multiplied.

	1 2.3	➡	1 decimal place
x	6.1 1	➡	2 decimal places
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	1 2 3		
	1 2 3 0		NEEDS
+	7 3 8 0 0		
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	7 5 1 5 3	➡	3 decimal places

# Rules for Multiplication - Example

4. Move the decimal point to the left the **TOTAL** number of places in the numbers being multiplied.

	1 2.3		1 decimal place
x	6.1 1		2 decimal places
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	1 2 3		
	1 2 3 0		NEEDS
+	7 3 8 0 0		
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	7 5.1 5 3		3 decimal places

# Rules for Multiplication - Example

## BIG HINT:

Check your answer using just whole numbers to make sure your answer is reasonable and the decimal point is in the correct place.

$12 \times 6 = 72$  so 75.153 is reasonable

Would 751.53 be reasonable?

Would 7.5153 be reasonable?

Would 7,515.3 be reasonable?