

## Lesson 1-5 Multiplying Decimals

SWBAT: Multiply decimals and solve word problems involving decimal numbers by correctly placing the decimal point.

Remember, multiplication can be shown in three different ways:

$$2 \times 3 \quad 2 \bullet 3 \quad \text{and} \quad 2 (3)$$

### Multiplying by a decimal:

- Multiplying decimals is similar to multiplying whole numbers.
- You do \_\_\_\_\_ the decimal points when you multiply (only add and subtract).
- Ignore the decimal points at the start and just multiply the numbers
- When you have your answer, count the number of decimal places and swing it over in the answer.

Ex:  $1.23$  (There are 2 places after the decimal point here)  
 $\times 0.5$  (There is 1 place after the decimal point here)

This means that we will have to move the decimal point over  $2 + 1 = 3$  times in our answer  $0.615$ .

Lets try this with  $2 \bullet 15$ . We all know that the answer is 30, but what if the numbers are decimals.

$$2 \bullet 1.5 = 3.0 \quad .2 \bullet 1.5 = .30 \quad .2 \bullet .15 = .030$$

Try a few on your own:

Ex: ①  $6 \bullet 0.13$

②  $0.574 \times 0.03$

③  $1.9 \bullet 5.32$

④  $0.486 \bullet 0.9$

⑤  $.45 \times 2.3$

⑥  $21 - 8.5 \times 0.7 + 5.15$

⑤ A eucalyptus tree grows 5.45 meters in one year. At that rate, how much does the tree grow in 3.5 years?

⑥ One pound of tomatoes costs \$1.29. To the nearest cent, how much do 2.75 pounds cost?

Challenge:  $\underline{\quad} \div 0.03 = 0.5$        $2.5 \bullet 3.75 \bullet 4.1 =$