**Lesson 2.4a Multiplying/Dividing Decimals**

EQ: How do we use what we know about multiplying/ dividing integers to multiply/divide decimals?

Key Idea: When multiplying/dividing decimals, use the same rules as multiplying/dividing integers.

**SAME SIGNS = POSITIVE ANSWER**

**+ • + = + , - • - = + , +(+) = + , - (-) = +**

**+ ÷ + = + , - ÷ - = +**

**DIFFERENT SIGNS = NEGATIVE ANSWER**

**+ • - = - , - • + = - , +(-)= - , - (+) = - ,**

**+ ÷ - = - , - ÷ + = -**

**MULTIPLYING DECIMALS**

**STEP 1-** Write the decimal with most digits above the other decimal number.

**STEP 2-** Multiply each digit on the bottom number by each digit on the top. (Be sure to use 0’s for placeholders)

**STEP 3-** Add up the answers from right to left.

**STEP 4-** Count the number of digits to the right of the decimal in each of the factors(two decimal numbers we just multiplied)

**STEP 5-** Count that many places from the right to place the decimal.

**STEP 6-** CHECK/ADD your + or – SIGN!

EX: **- 2.5 • 3.6 - 2.5 (1)**

 **3.6 (1)**

 **180**

 **720**

 **9.00 🡪 -9**

**DIVIDING DECIMALS**

**STEP 1-** Write the first number inside the division house.

**STEP 2-** Write the second number to the left of the division house.

**STEP 3-** Move the decimal in the number that is to the left of the house out of the number to the right, counting how many spaces you had to move it.

**STEP 4-** Move the decimal for the number on the inside to the right the same amount of spaces as in step 3. Add zeros for place holders if needed.

**STEP 5-** Place a decimal up into the answer space above the division house right above the decimal you just placed in the inside.

**STEP 6-** Complete the long division.

**STEP 7-** CHECK/ADD your + or – SIGN!

EX: **8 ÷ -2.2 3.63**

 2.2. 80.00

 66

 140 **- 3.63**

132

 80

 66

 14

**ON YOUR OWN:**

1. **(1.8)(-5.1) 2. -6.3(-.6)**

**3. -7.2 • 0.1 • (-100) 4. - .18 ÷ .03**

**Lesson 2.4a Multiplying/Dividing Decimals**

EQ: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Key Idea:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**SAME SIGNS = POSITIVE ANSWER**

**DIFFERENT SIGNS = NEGATIVE ANSWER**

**MULTIPLYING DECIMALS**

**STEP 1-** Write the decimal with most digits above the other decimal number.

**STEP 2-** Multiply each digit on the bottom number by each digit on the top. (Be sure to use 0’s for placeholders)

**STEP 3-** Add up the answers from right to left.

**STEP 4-** Count the number of digits to the right of the decimal in each of the factors(two decimal numbers we just multiplied)

**STEP 5-** Count that many places from the right to place the decimal.

**STEP 6-** CHECK/ADD your + or – SIGN!

EX: **- 2.5 • 3.6**

**DIVIDING DECIMALS**

**STEP 1-** Write the first number inside the division house.

**STEP 2-** Write the second number to the left of the division house.

**STEP 3-** Move the decimal in the number that is to the left of the house out of the number to the right, counting how many spaces you had to move it.

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**STEP 6-** Complete the long division.

**STEP 7-** CHECK/ADD your + or – SIGN!

EX: **8 ÷ -2.2**

**ON YOUR OWN:**

1. **(1.8)(-5.1) 2. -6.3(-.6)**

**3. -7.2 • 0.1 • (-100) 4. - .18 ÷ .03**