Name:_____

Date:_____ Per:_____

Lesson 3.2.4 Homework

3-73. Use what you learned during today's lesson to answer the following questions.

a. Show (2.3)(5.06) as a fraction multiplication problem and explain why the answer is in thousandths (three decimal places).

b. Show (0.004)(3.42) as a fraction multiplication problem and explain why the answer is in hundred-thousandths (five decimal places).

3-74. Mentally calculate the following products. Use the rule for decimal multiplication to write an equation in which the decimal point is written in the correct location.

a. $(-0.04)(-0.1)$

b. $(0.03)(-0.02)$

c. $(0.7)(0.4)$

d. Stacey said, "*Stephanie, look at my answer to the last problem,* $0.7 \cdot 0.4 = 0.28$*. Usually when I multiply, I get a bigger answer than the numbers I start with. Twenty-eight hundredths, 0.28, is less than either 0.4 or 0.7. I must have made a mistake."*

e. Stephanie responded, *"Well, one half times one half is one fourth, and one fourth is less then one half. I think when you multiply by a fraction or decimal less than one, you get less than you started with."*

f. Write a sentence or two about who you think is correct and why.

3-75. The highest point in the United States is Mount McKinley, also called Denali, in Alaska. Its summit is 20,335 feet above sea level. Badwater, a basin located in Death Valley, is the lowest point in the United States at 282 feet below sea level. How high is the summit of Denali above the Death Valley location? Show your calculation using absolute value symbols.

3-76. Find the mean, range, and median of the values: 12, 4, -2, 0, 9, -2, 1, 7, 8, 2. Recall that the range is calculated by finding the difference between the largest and smallest data values.

3-77. Simplify each multiplication problem below.

a. $\frac{5}{8} \cdot \frac{2}{3}$

b. $\frac{3}{4} \cdot \frac{2}{5}$