Name_____

Reteaching Page
3.6 Multiply Decimals

When you multiply with decimals the answer **gets smaller**! This "hard to wrap your mind around" concept is what causes plenty of difficulty when multiplying decimals. Let's **not** sweat the details!

(decimals are fractions, so multiplying by decimals is equivalent to dividing whole numbers
Example 8 * 0.25 = 8 ÷ 4...)

Multiplying Decimals is as easy as 1, 2, 3. If you can count, you **will** master this skill.

Step 1 – Count the Decimal Places

Step 2 – Drop the Decimals and Multiply

Step 3 – Put the Decimal Places Back

0.528 * 3.16 = _____

Step 1 – 528 and 16 are all decimal values. I count 5 decimal places. Record 5 so you don't forget it later!

0.528 * 3.16 = _____ (5)

Step 2 – 528 * 316 = 166848 (5)

Step 3 – we need to put 5 decimal places back into the answer. Start at the right; 84866 are the five places so we will put the decimal after the second 6. **1.66848**

Practice Counting Decimal Places

Record the number of decimal places will be in each product below.

____1) 1.7 * 0.54

____2) 9.34 * 1.6

____3) 0.91 * 8

____4) 1.54 * 0.23

Practice Putting Decimal Places Back

Put the correct number of decimal places into each product below.

5) 18.6 * 0.43 = 7998

6) 12.5 * 7 = 875

7) 6.43 * 0.81 = 52083

8) 0.76 * 4.2 = 3192

****Final Note**** Throughout my many years (20+) of teaching, the common error in multiplying decimals occurs the moment that you think you are skilled enough not to bother **writing down the number of decimal places** from step 1. Jotting down the number of decimal places is too simple and quick to skip! I promise that step will assure correct answers every time you multiply correctly!