Unit: Decimal Operations
Student Handout 2

Name _____

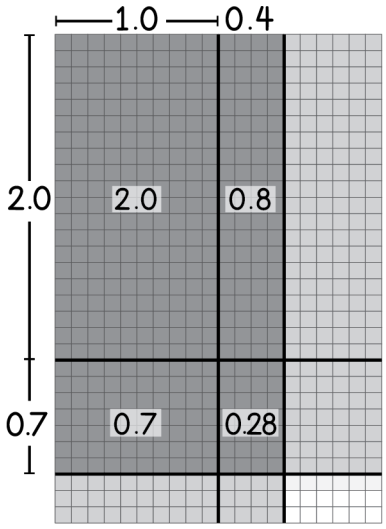
Date _____Pd_____

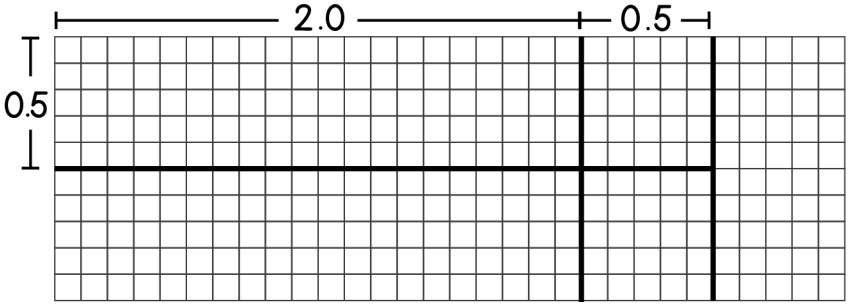
MULTIPLYING DECIMALS

The area models below represent two multiplication problems.

Example A: 2.7 · 1.4 = _____ Example B: 0.5 · 2.5 = _____

Use your understanding of Example A to complete the model for Example B.





MULTIPLYING DECIMALS WITH AN ALGORITHM

1. Multiply the digits as usual, ignoring the _____.
There is no need to line up the decimal if you are setting it up vertically.

2. The product will have the same number of _____ to the right of (behind) the decimal as the multiplicand and multiplier combined.

Determine how many digits will be behind the decimal in the solution. Do not solve.

1.	2.	3.	4.
46.7 · 16	1.58 · 0.23	0.07 · 432	0.9 · 8.55

We can use estimation to check for _____ .

Round each decimal to the nearest whole number in order to estimate a solution.

5.

$$\begin{array}{r} 1.9 \\ \times\ \ 6 \\ \hline 11.4 \end{array} \longrightarrow \begin{array}{r} 2 \\ \times\ 6 \\ \hline \end{array}$$

6.

$$\begin{array}{r} 0.94 \\ \times\ \ \ 5 \\ \hline 4.70 \end{array} \longrightarrow$$

7.

$$\begin{array}{r} 5.7 \\ \times\ 11 \\ \hline 62.7 \end{array} \longrightarrow$$

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Practice multiplying using the algorithm. Use the grid to keep your work organized.

8. 6.8×3

9. 15×0.7

10. 0.41×5

Solve questions 11-13 to show your understanding of multiplying decimals.

11. $20.8 \cdot 9 =$ _____

12. $7.19 \cdot 2.2 =$ _____

13. $115.3 \cdot 0.5 =$ _____

Apply your understanding of decimal multiplication to answer the questions below.

14. Amber walks her golden retriever 1.87 miles after work each day. If she works 5 days a week, how many miles does Amber walk her golden retriever in one week?

15. Fuji apples are priced at $1.79 per pound. If Hayden purchases 3.45 pounds of apples, what will the total price of his purchase be? Round to the nearest cent.

16. Sidney and Jorge solved the problems as shown. Who made a mistake, and what should the correct solution be?

SIDNEY	JORGE
$62.8 \cdot 3.7$	$50.9 \cdot 4.8$
2323.60	244.32

Summarize today's lesson:

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