

# Multiplying Decimals

Use the same strategy to multiply a decimal by a whole number or to multiply a decimal by a decimal.

Multiply  $0.72 \times 23$ .

Ignore the decimal points. Multiply as you would with two whole numbers.

Count the number of decimal places in both factors. Use that number of decimal places to write the answer.

$$\begin{array}{r} 0.72 \\ \times 23 \\ \hline 216 \\ 144 \\ \hline 1656 \\ 16.56 \end{array}$$

2 decimal places

Multiply  $0.45 \times 0.8$ .

Ignore the decimal points. Multiply as you would with two whole numbers.

Count the number of decimal places in both factors. Use that number of decimal places to write the answer.

$$\begin{array}{r} 0.45 \\ \times 0.8 \\ \hline 360 \\ 0.360 \end{array}$$

$2 + 1 = 3$  decimal places

Place the decimal point in each product.

1.  $1.2 \times 3.6 = 432$

2.  $5.5 \times 3.77 = 20735$

3.  $4.4 \times 2.333 = 102652$

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Find the product.

4.  $7 \times 0.5$  \_\_\_\_\_

5.  $12 \times 0.08$  \_\_\_\_\_

6.  $24 \times 0.17$  \_\_\_\_\_

7.  $0.4 \times 0.17$  \_\_\_\_\_

8.  $1.9 \times 0.46$  \_\_\_\_\_

9.  $3.42 \times 5.15$  \_\_\_\_\_

10. **Writing to Explain** If you multiply two decimals less than 1, can you predict whether the product will be less than or greater than either of the factors? Explain.

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11. **Number Sense** Two factors are multiplied and their product is 34.44. One factor is a whole number. How many decimal places are in the other factor?

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