

Lesson 1-5

Multiplying Decimals

Lesson Objective	Common Core State Standards
To multiply decimals and to solve problems by multiplying decimals	The Number System: 6.NS.3 Equations and Expressions: 6.EE.2.b

Examples

1 Multiplying by a Decimal Find the product 2.73×4 .

$$\begin{array}{r}
 2.73 \leftarrow 2 \text{ decimal places} \\
 \times 4 \leftarrow + 0 \text{ decimal places} \\
 \hline
 \square \square . \square 2 \leftarrow \square \text{ decimal places}
 \end{array}$$

2 Multiplying Decimals Find the product 0.6×0.42 .

$$\begin{array}{r}
 0.42 \leftarrow 2 \text{ decimal places} \\
 \times 0.6 \leftarrow + \square \text{ decimal places} \\
 \hline
 \square . \square \square \square \leftarrow \square \text{ decimal places}
 \end{array}$$

Quick Check

1. a. Find 6×0.13

b. Find 4.37×5 .

c. Find 7×0.8

d. Find 0.22×3 .

2. Find each product.

a. $0.3(0.2)$

b. $1.9 \cdot 5.32$

c. 0.9×0.14

Example

- 3 Cameron can read 196 words in a minute. Robert reads 1.6 times as fast. How many words can Robert read in a minute?

Estimate $196 \times 1.6 \approx 200 \times 1.5$, or .

1 9 6 ← 0 decimal places

× 1. 6 ← decimal place

1 1 7 6

+1 9 6

.6 ← decimal place

Robert can read about words in a minute.

Check for Reasonableness is reasonable since it is close to .

Quick Check

3. One pound of tomatoes costs \$1.29. To the nearest cent, how much do 2.75 pounds of tomatoes cost?