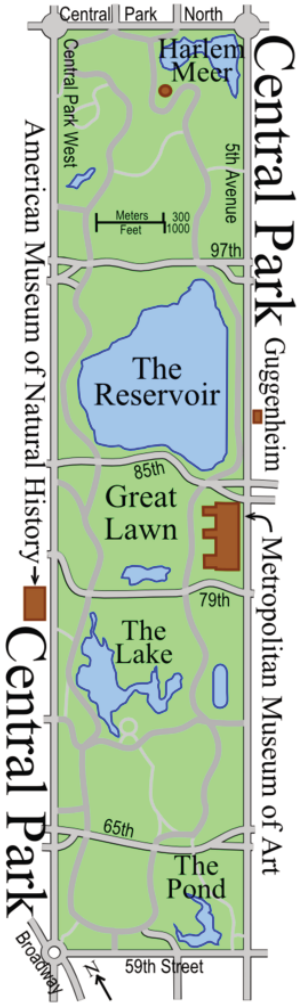
Unit 5, Lesson 21

Multiply More Decimals

Let's multiply decimals.

Warm-up

Estimation Exploration: Central Park



Central Park is a large park in Manhattan. It is about 3.85 kilometers long and 0.79 kilometer wide. What is the approximate area of Central Park?

Record an estimate that is:

too low	about right	too high

Activity 1

Multiply More Decimals

1. Explain or show why each pair of expressions have the same value.

   a. 7.2×5.3 and $(72 \times 53) \times 0.01$

   b. 6.5×2.8 and $(65 \times 28) \div 100$

   c. 31×0.44 and $(31 \times 44) \times \frac{1}{100}$

2. Find the value of the products in the previous problem.

Activity 2

Choose Your Strategy

Find the value of each product.

1. 7.3×4.2

2. 38×0.55

3. 285×0.17

Section C Summary

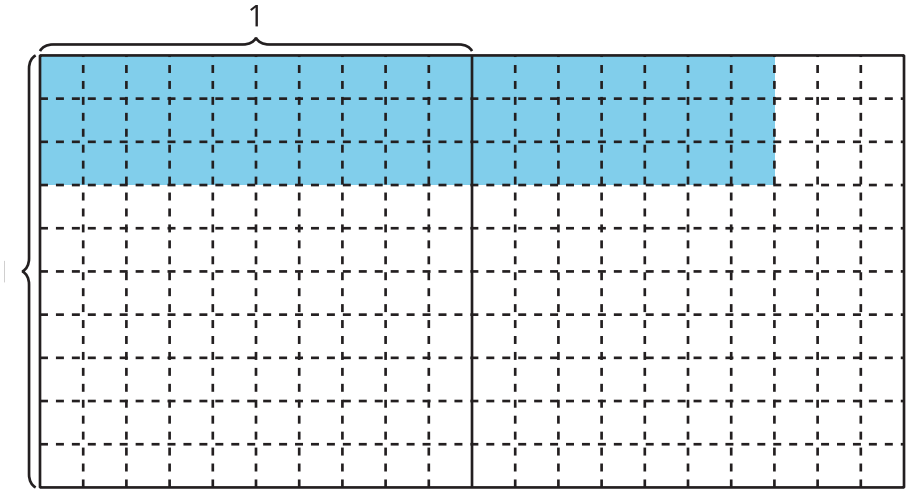
We learned different strategies for multiplying with decimals.

We used place value relationships to reason about the multiplication.

Example: $6 \times 0.14 = 0.84$ because 6 groups of 14 hundredths is 6×14 or 84 hundredths.

We used properties of operations to break up the multiplication.

Example: $0.9 \times 0.3 = (9 \times 3) \times 0.01 = 27 \times 0.01 = 0.27$

We also used diagrams to represent the multiplication.

Example: This diagram shows 17 groups of 3 hundredths is 51 hundredths, so $1.7 \times 0.3 = 0.51$.