

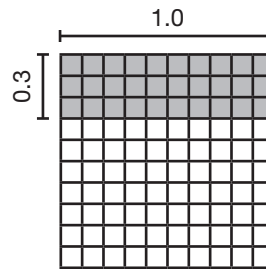
Models for Multiplying Decimals

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

Multiply 1.0×0.3

Use an area model and hundredths grid to find the product.

Each factor becomes a side length of a rectangle.



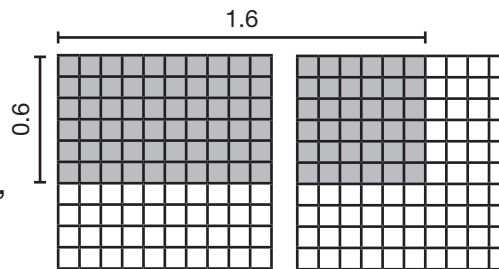
Count the hundredths cells in the shaded area to find the product.

$$1.0 \times 0.3 = 0.3$$

Multiply 1.6×0.6

Use an area model and a hundredths grid to find the product.

Because one factor is greater than 1, you will need to use 2 hundredths grids (for a total of 2 units).



Count the hundredths cells in the shaded area to find the product.

$$1.6 \times 0.6 = 0.96$$

Place the decimal point in each product.

1. $1.2 \times 3.6 = 432$

2. $5.5 \times 3.7 = 2035$

3. $4.4 \times 2.3 = 1012$

Find the product.

4. 7×0.5 _____

5. 12×0.08 _____

6. 24×0.17 _____

7. 0.4×0.7 _____

8. 1.9×0.4 _____

9. 3.42×5 _____

10. 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.

Name _____

Models for Multiplying Decimals

Place the decimal point in each product.

1. $3 \times 6.89 = 2067$ _____ 2. $0.3 \times 4.5 = 1350$ _____

Find each product.

3. $14.3 \times 2.1 \times 8 =$ _____ 4. $0.45 \times 100 =$ _____

5. $67.1 \times 0.3 \times 40 =$ _____ 6. $58 \times 4.21 =$ _____

7. Show how to find the product of 16.2×4 using addition.

8. Which activity is 6 times faster than the fastest rowing speed?

9. The fastest speed a table tennis ball has been hit is 21.12 times faster than the speed for the fastest swimmer. What is the speed for the table tennis ball?

10. How fast would 3 times the fastest rowing speed be?

11. Which is the product of 241.82×3.1 ?

A 7.498

B 749.642

C 74.958

D 7.5

12. Explain why multiplying 37.4×0.1 gives a product that is less than 37.4.

