

Multiply Decimals



Math Tools



Dear Family,

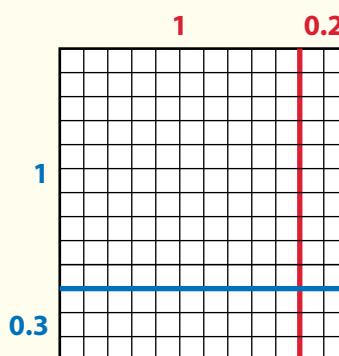
This week your child is learning to multiply decimals.

One way your child is learning to show decimal multiplication is with an area model.

The model at right shows 1.2×1.3 .

The width of the model represents 1.2.

The length of the model represents 1.3.



Multiply to find the area of each section in the model.

Then add the partial products.

$$1 + 0.2 + 0.3 + 0.06 = 1.56$$

$$1.2 \times 1.3 = 1.56$$

| | |
|----------------------|-------------------------|
| $1 \times 1 = 1$ | $1 \times 0.2 = 0.2$ |
| $0.3 \times 1 = 0.3$ | $0.3 \times 0.2 = 0.06$ |

To decide whether the product is reasonable, your child is learning to estimate the product of a decimal multiplication such as 1.2×1.3 .

- Round each factor to the nearest whole number. (Round 1.2 to 1. Round 1.3 to 1.)
- Multiply the rounded numbers to estimate the product. ($1 \times 1 = 1$)
- The product should be about 1.

The product 1.56 is close to the estimated product, 1.

Invite your child to share what they know about multiplying decimals by doing the following activity together.

ACTIVITY MULTIPLYING DECIMALS

Do this activity with your child to multiply decimals.

Materials calculator, pencil, paper

Work with your child to do an activity that involves decimal multiplication.

- On a sheet of paper, one person writes down two decimal numbers. With a calculator, multiply the two numbers without the decimal points.
- The other person estimates the product of the two numbers written on the sheet of paper. That person then explains where the decimal point should be placed in the product shown on the calculator.
- Check the answer by multiplying the decimals with the calculator.
- Take turns and repeat the activity.



Look for real-world examples of multiplying decimals. For example, you might buy 12.5 gallons of gas at a price of \$3.62 a gallon or 2.5 pounds of apples at a price of \$0.99 per pound. Work together with your child to estimate the product and then check your estimates with the receipt.