

Unit 4

Family Letter

Reveal
MATH[®]

Dear Family,

In this unit, *Add and Subtract Decimals*, your child will learn different strategies to add and subtract decimals.

STEM Career Kid for this Unit

Hi, I'm Ruby.

I want to be a veterinarian. I will use math in my job when I determine the amount of medication needed for animals. I'll show students how I will add and subtract decimals in my work.



What math terms will your child use?

Term	Student Understanding
sum	The result of an addition problem; the sum of 5.5 and 2.3 is $5.5 + 2.3 = 7.8$.
difference	The result of a subtraction problem; the difference of 5.5 and 2.3 is $5.5 - 2.3 = 3.2$.
estimate	A number that approximates the actual answer to help know whether the calculated answer is reasonable; the numbers in a problem are rounded so that a number that is close to the actual answer is obtained, but is easier to calculate.
decompose	To break a number into different parts; for example, 175.27 can be decomposed into $100 + 70 + 5 + 0.2 + 0.07$.



What can your child do at home?

Help your child gain practice with the strategies used to add and subtract decimals. Solve an addition or subtraction problem each night using two different strategies. Keep each representation until the end of the unit. At that time, review each representation and discuss which strategy or strategies your child prefers.

What Will Students Learn in This Unit?

Estimating Sums and Differences of Decimals

Your child will learn how to estimate sums and differences of decimals by rounding before adding or subtracting.

Example

John has 1.7 pounds of carrots and 4.9 pounds of green peppers. *About* how many pounds of vegetables does John have?

$$\begin{array}{r} 1.7 \\ \downarrow \\ 2 \end{array} + \begin{array}{r} 4.9 \\ \downarrow \\ 5 \end{array} = 7$$

John has *about* 7 pounds of vegetables.

Adding Decimals

Your child will learn how to use different strategies to add decimals. Students can use decimal grids to find the sum of two decimals. Students can also add by decomposing the numbers and adding the numbers that have the same place values. The example below shows how to find the sum of 1.29 and 0.64.

$$1.29 = 1 + 0.2 + 0.09 \quad \text{and} \quad 0.64 = 0 + 0.6 + 0.04$$

Add the numbers with the same place values:

$$1 + 0 = 1$$

$$0.2 + 0.6 = 0.8$$

$$0.09 + 0.04 = 0.13$$

Then find the sum: $1 + 0.8 + 0.13 = 1.93$

So $1.29 + 0.64 = 1.93$.

Subtracting Decimals

Your child will learn how to use different strategies to subtract decimals. Students will learn how to subtract by decomposing the number being subtracted or by counting up from the number being subtracted. The example below shows how to find the difference $71.8 - 14.5$.

To decompose the number being subtracted, think of subtracting 14.5 as subtracting 10, subtracting 4, and subtracting 0.5.

$$71.8 - 10 = 61.8$$

$$61.8 - 4 = 57.8$$

$$57.8 - 0.5 = 57.3$$

So $71.8 - 14.5 = 57.3$