Dear Family,

Your child is learning about adding and subtracting decimals to the thousandths.

Your child has previously learned that adding and subtracting decimals is the same as adding and subtracting whole numbers. You line up the place values and then add or subtract as usual. With decimals, you must remember to bring down the decimal point and place it correctly in the sum or difference.

There are a few things to keep in mind when you add and subtract decimals.

- Start by estimating the sum or difference before you add or subtract. Then you can use the estimate to help you find the answer or check that your answer is reasonable.
- When decimals have different numbers of decimal places, such as 14.7 and 1.259, you can use zeros to write the decimals to the same number of decimal places. For example, 14.7 is the same as 14.700, which has the same number of decimal places as 1.259. This can help you keep the place values lined up.

$$\begin{array}{rcl} 14.7 & \longrightarrow & 14.700 \\ +\ 1.259 & \longrightarrow & +\ 01.259 \end{array}$$

Consider the following example:

Karl plans to ship a box containing three gifts to his nephews. There is one shipping cost for any box that weighs up to 5 pounds. The cost increases for boxes heavier than 5 pounds.

Karl plans to ship gifts weighing 1.19 pounds, 2.3 pounds, and 1.726 pounds. What is the total weight of the gifts?

On the next page you will see two ways your child may add decimals to find the total weight of the gifts.

NEXT

Add and Subtract Decimals: Sample Solution

Three gifts weigh 1.19 pounds, 2.3 pounds, and 1.726 pounds. What is the total weight of the gifts?

You can find the total weight by adding. Start by estimating the sum by rounding each decimal up or down.

1.19 is close to 1	2.3 is close to 2	1.726 is close to 2

Then add: $1 + 2 + 2 = 5$. The weight of the gifts is about 5 pounds.

One way:
Use a place-value chart to add.

Ones	·	Tenths $\frac{1}{10}$	Hundredths $\frac{1}{100}$	Thousandths $\frac{1}{1,000}$
1	·	1	9	
+2	·	3		
+1	·	7	2	6
5	·	**2**	**1**	**6**

Another way:

Line up the decimal points to add.

$$\begin{array}{r} 1.19 \\ 2.3 \\ +\ 1.726 \\ \hline \end{array}$$

Place zeros to make sure that you add the same place values.

$$\begin{array}{r} 1.190 \\ 2.300 \\ +\ 1.726 \\ \hline \end{array}$$

Add.

$$\begin{array}{r} {\scriptstyle 1\ 1} \\ 1.190 \\ 2.300 \\ +\ 1.726 \\ \hline 5.216 \end{array}$$

Answer: Both methods show that the sum is 5.216, which means that the total weight of the three gifts is 5.216 pounds. Notice that 5.215 is close to the estimate of 5 pounds, so it is a reasonable answer.