

Divide Decimals



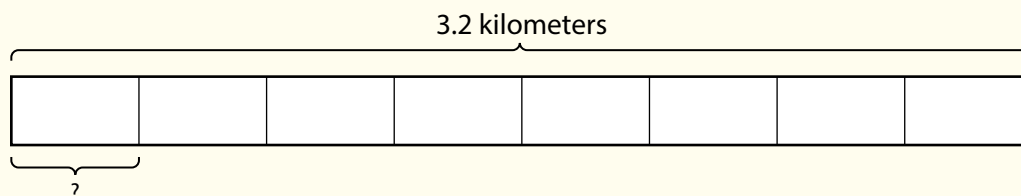
Dear Family,

This week your child is learning to divide with decimals.

Your child might see a problem like this:

Nolan is running in a 3.2-kilometer race. Water stations mark off 8 equal sections of the race. How far apart are the water stations?

One way to understand the relationship of the quantities in the problem is to use a bar model.



The whole bar represents the length of the race, 3.2 kilometers. The bar has 8 equal sections. Find the length of each section to find how far apart the water stations are.

Divide 3.2 by 8 to find the length of each shorter section.

One way your child is learning to divide decimals is to think about multiplying decimals. Division and multiplication are related operations.

To find $3.2 \div 8$, think $8 \times ? = 3.2$.

$$3.2 = 32 \text{ tenths}$$

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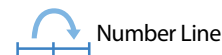
$$8 \times 4 \text{ tenths} = 32 \text{ tenths}$$

The answer, 4 tenths, is the length represented by each section of the bar model. The water stations are 0.4 kilometer apart.

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



Math Tools



Number Line



Fraction Models

ACTIVITY DIVIDING DECIMALS

Do this activity with your child to divide decimals.

Work with your child to solve a real-world problem involving dividing decimals.

- Think of something you spend money on for the whole family, such as the grocery bill, tickets to the movies, or a new board game.
- Divide the cost by the number of people in your family. This will describe the cost for each family member.

For example: A book of puzzles costs \$11.76. There are 4 people in the family.
To find the cost for each person, divide 11.76 by 4.

- Check that the answer is reasonable. In the example above, is 29.4 a reasonable answer for $11.76 \div 4$?

Be on the lookout for other real-world examples of dividing decimals that you can share with your child.



Answer: no; The cost for each person is \$2.94.