

Fractions as Division



Dear Family,

This week your child is learning how fractions and division are related.

He or she might see a problem like the one below.

Three family members equally share 4 granola bars. How much does each family member receive?

This word problem can be represented as a division problem. The family equally shares 4 granola bars among 3 people, so the division problem to solve is $4 \div 3$.

A model is a useful way to show the problem.

The model below shows 4 wholes. Each whole is divided into 3 parts.



Each family member receives $\frac{1}{3}$ of each of 4 whole bars. So, the answer to the division problem $4 \div 3$ is $\frac{4}{3}$. You can say that the fraction $\frac{4}{3}$ represents the division problem $4 \div 3$.

This shows how fractions and division are related. You can think of fractions as the division of two numbers.

Another way to write the fraction $\frac{4}{3}$ is to show it as a mixed number. So, each family member receives $\frac{4}{3}$, or $1\frac{1}{3}$, granola bars.

Invite your child to share what he or she knows about how fractions and division are related by doing the following activity together.



ACTIVITY FRACTIONS AS DIVISION

Do this activity with your child to explore fractions as division.

Work with your child to find opportunities to practice modeling a division situation as a fraction.

- Together with your child, think of things that can be shared equally among family members, such as boxes of crackers or bags of grapes.
- Choose one idea. Work together with your child to show how to equally divide a number of the items among the people in your family.

Example: 4 family members equally share 7 bags of trail mix.

- Have your child write the idea as a division problem.

Example: $7 \div 4 = \frac{7}{4}$

- Have your child explain how much of the item each family member will get.

Example: Each person will get $\frac{7}{4}$, or $1\frac{3}{4}$, bags of trail mix.

