Family Letters

English

Dear Family,

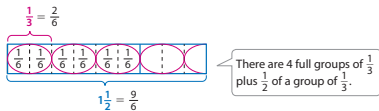This week your student is learning how to divide fractions.

When dividing fractions, it is helpful to think about the relationship between multiplication and division. Just as the equations $2 \times 4 = 8$ and $8 \div 4 = 2$ tell you there are **two 4**s in **8**, the equations below tell you there is only **half** of $\frac{1}{4}$ in $\frac{1}{8}$.

$$\frac{1}{2} \times \frac{1}{4} = \frac{1}{8} \qquad \frac{1}{8} \div \frac{1}{4} = \frac{1}{2}$$

Your student will be learning to solve problems like the one below.

> A recipe calls for $1\frac{1}{2}$ cups of rice. You only have a $\frac{1}{3}$-cup measure. How many scoops of the $\frac{1}{3}$-cup measure should you use?

➤ **ONE WAY** to find how many $\frac{1}{3}$s are in $1\frac{1}{2}$ is to use the common denominator 6.

Split 1 whole into parts of size $\frac{1}{6}$. Now you can see that $1\frac{1}{2} = \frac{9}{6}$ and $\frac{1}{3} = \frac{2}{6}$.

$$\frac{1}{3} = \frac{2}{6}$$

> There are 4 full groups of $\frac{1}{3}$ plus $\frac{1}{2}$ of a group of $\frac{1}{3}$.

$$1\frac{1}{2} = \frac{9}{6}$$

$$1\frac{1}{2} \div \frac{1}{3} = \frac{9}{6} \div \frac{2}{6} = 4\frac{1}{2}$$

➤ **ANOTHER WAY** is to use multiplication.

Multiply $1\frac{1}{2}$ by 3 to find how many $\frac{1}{3}$s are in $1\frac{1}{2}$ wholes.

$$1\frac{1}{2} \div \frac{1}{3} = 1\frac{1}{2} \times 3 \quad \longleftarrow \text{The numbers } \frac{1}{3} \text{ and 3 are called \textbf{reciprocals}.}$$
$$= \frac{3}{2} \times 3$$
$$= \frac{9}{2}, \text{ or } 4\frac{1}{2}$$

Using either method, you need $4\frac{1}{2}$ scoops of the $\frac{1}{3}$-cup measure to have $1\frac{1}{2}$ cups of rice.

> Use the next page to ... conversation about ...

Spanish

Estimada familia:

Esta semana su niño está aprendiendo a dividir fracciones.

Cuando se dividen fracciones, es útil pensar en la relación que hay entre la multiplicación y la división. Al igual que las ecuaciones $2 \times 4 = 8$ y $8 \div 4 = 2$ indican que hay **dos 4** en **8**, las siguientes ecuaciones indican que hay solo la **mitad** de $\frac{1}{4}$ en $\frac{1}{8}$.

$$\frac{1}{2} \times \frac{1}{4} = \frac{1}{8} \qquad \frac{1}{8} \div \frac{1}{4} = \frac{1}{2}$$

Su niño aprenderá a resolver problemas como el siguiente.

> Una receta requiere $1\frac{1}{2}$ tazas de arroz. Solo tienes un cucharón de $\frac{1}{3}$ de taza de capacidad. ¿Cuántos cucharones de $\frac{1}{3}$ de taza deberías usar?

➤ **UNA MANERA** de hallar cuántos $\frac{1}{3}$ hay en $1\frac{1}{2}$ es usar el denominador común 6.

Separen 1 entero en partes de tamaño $\frac{1}{6}$. Ahora pueden ver que $1\frac{1}{2} = \frac{9}{6}$ y $\frac{1}{3} = \frac{2}{6}$.

$$\frac{1}{3} = \frac{2}{6}$$

> Hay 4 grupos completos de $\frac{1}{3}$ más $\frac{1}{2}$ de un grupo de $\frac{1}{3}$.

$$1\frac{1}{2} = \frac{9}{6}$$

$$1\frac{1}{2} \div \frac{1}{3} = \frac{9}{6} \div \frac{2}{6} = 4\frac{1}{2}$$

➤ **OTRA MANERA** es usar la multiplicación.

Multipliquen $1\frac{1}{2}$ por 3 para hallar cuántos $\frac{1}{3}$ hay en $1\frac{1}{2}$ enteros.

$$1\frac{1}{2} \div \frac{1}{3} = 1\frac{1}{2} \times 3 \quad \longleftarrow \text{Los números } \frac{1}{3} \text{ y 3 se llaman \textbf{recíprocos}.}$$
$$= \frac{3}{2} \times 3$$
$$= \frac{9}{2}, \text{ o } 4\frac{1}{2}$$

Usando cualquiera de los dos métodos, se necesitan $4\frac{1}{2}$ cucharones de $\frac{1}{3}$ de taza para tener $1\frac{1}{2}$ tazas de arroz.

> Usen la siguiente página para comenzar una conversación acerca de la división de fracciones.

Tagalog

Mahal na Pamilya,

Sa linggong ito ay matututuhan ng inyong estudyante ang pag-divide ng mga fraction. Kapag nagdi-divide ng mga fraction, isipin ang kaugnayan ng multiplication at division. Katulad ng ipinapakita ng mga equation na $2 \times 4 = 8$ at $8 \div 4 = 2$ na mayroong dalawang **4** sa **8**, ipinapakita naman ng mga equation sa ibaba na mayroon lamang kalahati ng $\frac{1}{4}$ sa $\frac{1}{8}$.
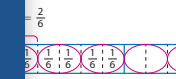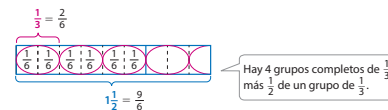
$$\frac{1}{2} \times \frac{1}{4} = \frac{1}{8} \qquad \frac{1}{8} \div \frac{1}{4} = \frac{1}{2}$$

Matututuhan niyang sagutan ang mga tanong na gaya nito.

> Nangangailangan ang isang recipe ng $1\frac{1}{2}$ cups ng kanin. Mayroon ka lamang pansukat na $\frac{1}{3}$ cup ang laki. Ilang takal ng pansukat na $\frac{1}{3}$ cup ang kailangan mong gamitin?

... ANG PARAAN para malaman kung ilang $\frac{1}{3}$ mayroon sa $1\frac{1}{2}$ ay gamitin ang ... na denominator na 6. Hatiin ang 1 buo sa mga bahaging tig-$\frac{1}{6}$ ang laki. ... mo sa bar model na $1\frac{1}{2} = \frac{9}{6}$ at $\frac{1}{3} = \frac{2}{6}$.

$$\frac{1}{3} = \frac{2}{6}$$

> Mayroong 4 na buong grupo ng $\frac{1}{3}$, at $\frac{1}{2}$ ng isang grupo ng $\frac{1}{3}$.

$$1\frac{1}{2} = \frac{9}{6}$$

$$1\frac{1}{2} \div \frac{1}{3} = \frac{9}{6} \div \frac{2}{6} = 4\frac{1}{2}$$

... PANG PARAAN ay gumamit ng multiplication.

... ly ang $1\frac{1}{2}$ sa 3 para malaman kung ilang $\frac{1}{3}$ mayroon sa $1\frac{1}{2}$.

$$1\frac{1}{2} \div \frac{1}{3} = 1\frac{1}{2} \times 3 \quad \longleftarrow \text{Ang mga numerong } \frac{1}{3} \text{ at 3 ay tinatawag na \textbf{mga reciprocal}.}$$
$$= \frac{3}{2} \times 3$$
$$= \frac{9}{2}, \text{ or } 4\frac{1}{2}$$

... ng paraan ang gamitin, kailangan mo ... na takal gamit ang pansukat na $\frac{1}{3}$-cup para makakuha ng $1\frac{1}{2}$ cups ng kanin.

> Gamitin ang kasunod na pahina para simulan ng talakayan tungkol sa pag-divide ng mga fraction.