

Activity 23 Assessment

Dividing Fractions

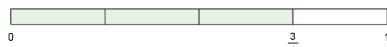
Dividing Fractions

Divides a whole number by a fraction or vice versa

$$\frac{3}{4} \div 3$$

"I know that $\frac{3}{4}$ is made up of 3 one-fourth pieces.

So, when I divide by 3, I get $\frac{1}{4}$.

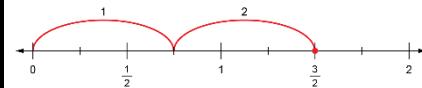


$$\frac{3}{4} \div 3 = \frac{1}{4}$$

Divides a fraction by another fraction, without needing to partition a 'left-over' portion

$$\frac{3}{2} \div \frac{3}{4}$$

"I want to know how many three-fourths are in 3 halves. I can start by drawing a number line, partitioning it in fourths, marking $\frac{3}{2}$ and making hops of $\frac{3}{4}$ until I get there.

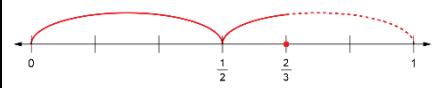


It takes 2 hops, so $\frac{3}{2} \div \frac{3}{4} = 2$."

Divides a fraction by another fraction, with partitioning of a 'left-over' portion

$$\frac{2}{3} \div \frac{1}{2}$$

"I drew a number line from 0 to 1 and marked $\frac{2}{3}$ on it. I also added markings for sixths because I know that $\frac{1}{2}$ is the same as $\frac{3}{6}$ and $\frac{2}{3}$ is the same as $\frac{4}{6}$. I made hops that were $\frac{1}{2}$ unit long.



From my model, I can see that it takes $1\frac{1}{3}$ hops to get to $\frac{2}{3}$, so $\frac{2}{3} \div \frac{1}{2} = 1\frac{1}{3}$.

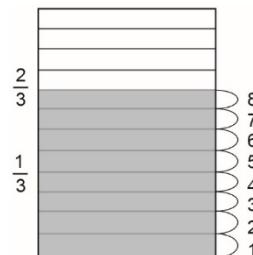
Represents and solves problems that involve fraction division

Blake knows that it takes $\frac{1}{12}$ of a jug to fill a glass with juice.

The juice jug is $\frac{2}{3}$ full.

How many glasses can Blake fill?

"I drew a jug, showed the juice and the amount for each glass, and counted the number of glasses.



From my drawing, Blake can fill 8 glasses."

Observations/Documentation