Math in Food

On my birthday, I invited two of my friends to a pizza restaurant for dinner. Of course, we ordered pizza. We all love pizza! We sat with Mom and Dad, and my older brother. The waiter brought two pizzas to the table.

"Two pizzas!" joked Dad. "One for Mom and me to eat, and one for the rest of you!"

"That is unfair!" I exclaimed. "That means that you and Mom will have 2 slices each, which is half of the pizza. We will only have 1 slice each. That is only one quarter of the pizza!"

"Never mind!" said Mom. "We can order another pizza. The four of you can share 2 pizzas."

Before we knew it, the waiter had delivered another pizza for us kids to share.

"So," said my older brother, who thinks he is really good at math, "if we all eat a quarter from both of the pizzas, what fraction of a whole pizza will each of us eat?"

Our pizzas

LET'S EXPLORE MATH

Variables (VAIR-ee-uh-buhls) are letters or symbols that can be used to **represent** numbers. Often, the letter x is used to represent a number. An **equation** is a mathematical sentence that shows 2 equal numbers or quantities. It is written with an equal sign.

Look at the pictures above. They show the pizzas that were eaten at the birthday dinner. Each pizza had 4 slices. The equation $\frac{1}{4} + \frac{1}{4} = x$ can be used to find what fraction of the pizza each kid ate.

a. What does x represent?

b. What does x equal?

I looked at my two friends. "Easy!" I said. "We each eat a quarter from one pizza, then a quarter from the other. That makes two quarters, which makes half a pizza. We will each be eating the same fraction of pizza as Mom and Dad! We could write an equation to show the equivalent fractions: $\frac{2}{4} = \frac{1}{2}$."

$$\frac{2}{4} = \frac{1}{2}$$

We each ate 2 quarters of pizza.

Mom and Dad each ate half a pizza.
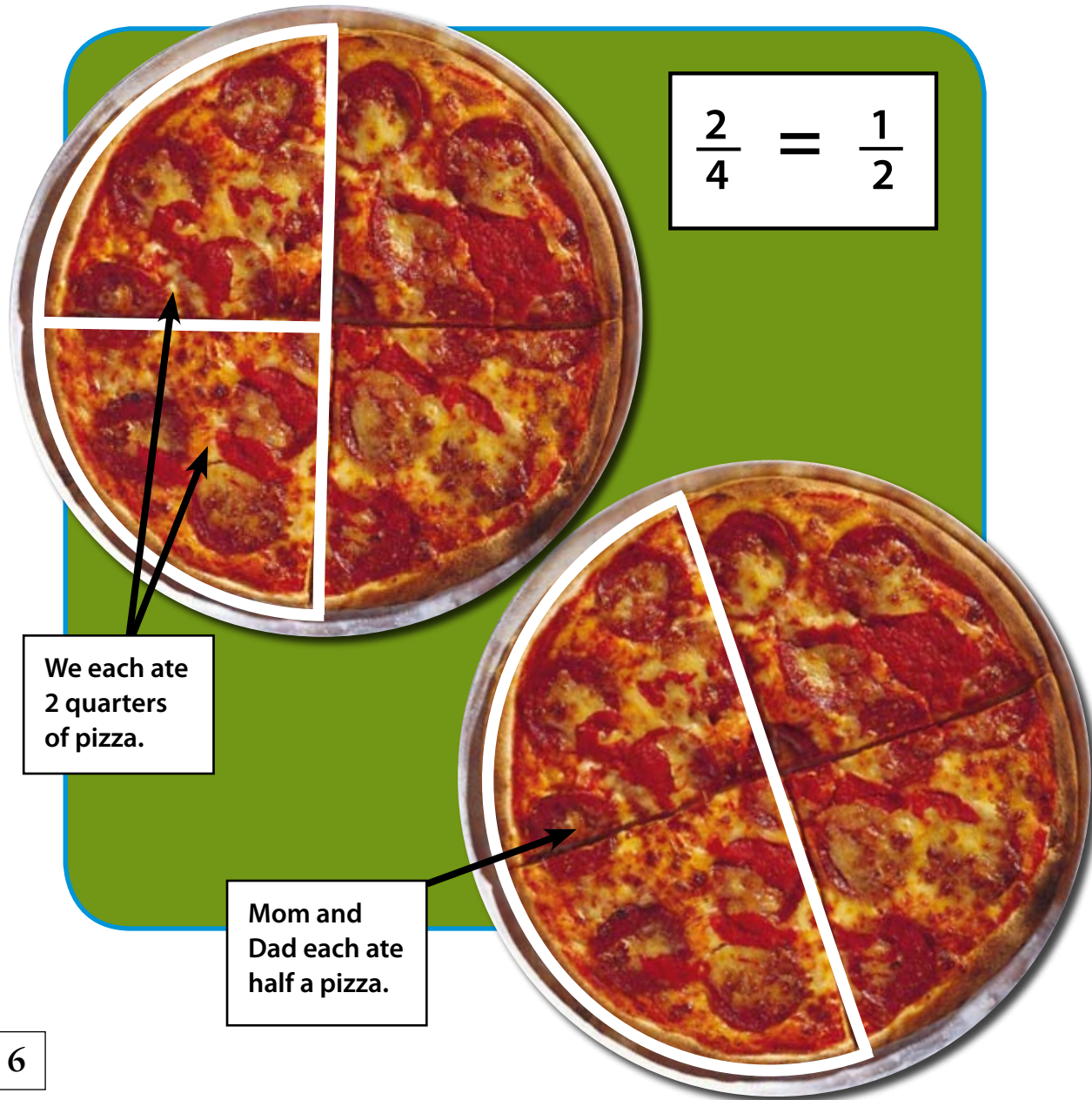
Later that night, back at home, I grabbed an apple for a snack. I cut the apple into slices. Quickly, my older brother ate 3 of the slices. There were 5 slices left for me. I used math to figure out how many slices I started with.
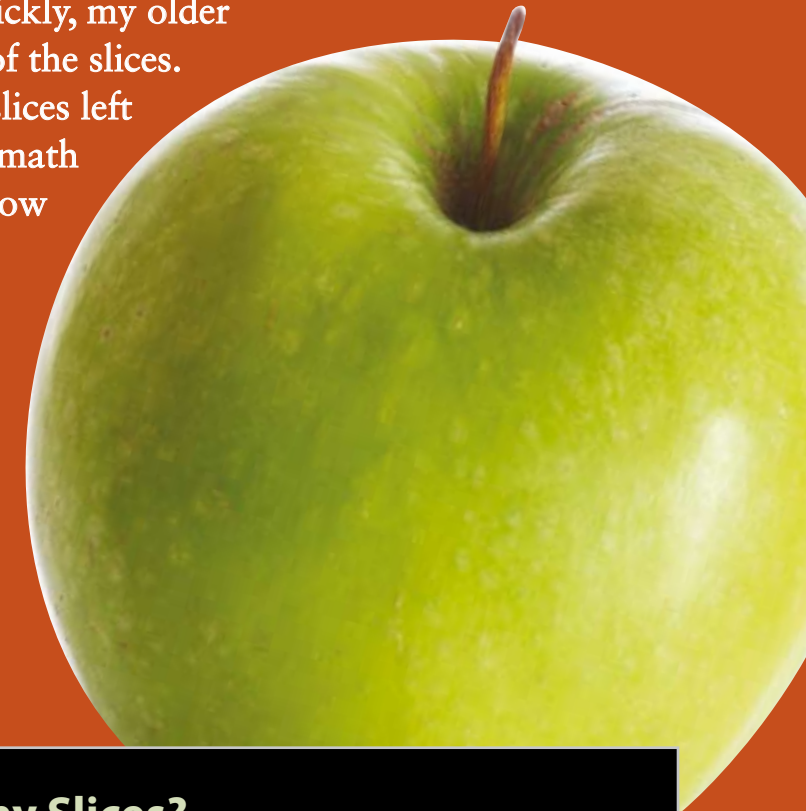
How Many Slices?

I can use the equation $x - 3 = 5$ to figure out how many slices I started with.
x represents the number of slices I started with.
3 represents the number of slices my brother ate.
5 represents the number of slices I had left.

I can add to solve for x.
$x - 3 = 5$
$5 + 3 = x$
$5 + 3 = 8$
That means I started with 8 slices.