

Grade 1 · Halves and Fourths · Lesson

Common Core 1.G.A.3 · mathovore.fr

Halves and fourths are equal shares of a whole shape. Cut a circle or rectangle into 2 equal shares to make halves. Cut it into 4 equal shares to make fourths, also called quarters. Two halves make a whole, and four fourths make a whole. More shares means smaller shares.

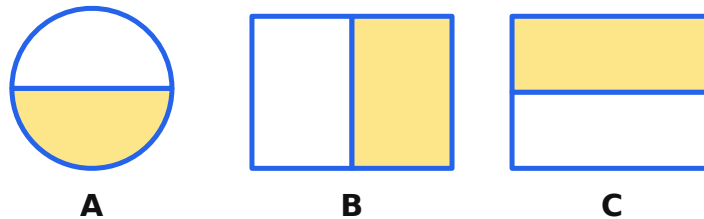
Grade 1 Common Core: 1.G.A.3

Key facts:

- Equal shares are the same size.
- 2 equal shares are called halves.
- 4 equal shares are called fourths or quarters.
- 2 halves make 1 whole, and 4 fourths make 1 whole.
- More equal shares means each share is smaller.

What are halves?

A **whole** is one full shape, like a whole pizza or a whole sheet of paper. We can cut a whole into 2 **equal shares**. Equal means the same size. Each share is called a **half**. Two shares make **halves**.



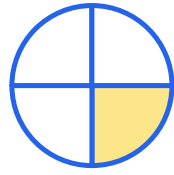
Circle A, rectangle B, and rectangle C are each cut into 2 equal shares. One half of each is colored.

Half

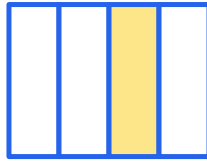
When a whole is cut into **2 equal shares**, each share is **half of** the whole. The colored part of circle A is half of the circle.

What are fourths and quarters?

We can also cut a whole into 4 equal shares. Each share is a **fourth**. A fourth is also called a **quarter**. Both words mean the same thing. Say “a fourth of the pizza” or “a quarter of the pizza.”



D



E



F

Shapes D, E, and F are cut into 4 equal shares. One fourth of each is colored.

How can you tell if the shares are equal?

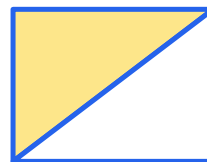
Look at the size of every share. If one share is bigger, the shares are not equal. Then they are *not* halves and *not* fourths. A shape can be cut in different ways and still show halves, as long as the 2 shares match.



Equal



Not equal



Equal

The first and third rectangles show halves. The middle rectangle has one share bigger, so it does not show halves.

How do the shares make a whole?

Equal shares	Name	All the shares make
2	halves	2 halves = 1 whole
4	fourths (quarters)	4 fourths = 1 whole

The whole is two of the shares, or four of the shares. More shares means smaller shares. A fourth is smaller than a half of the same shape.



1 whole



2 halves



4 fourths

The same rectangle cut into 1, 2, and 4 equal shares. The more shares, the smaller each share.

How do you cut a shape into fourths?

1. Look at the whole shape.
2. Draw lines to make 4 shares.
3. Check that all 4 shares are the same size.
4. Call each share a fourth or a quarter.

Example: Maya has a square sandwich. She cuts it with 2 lines that cross in the middle. She gets 4 matching squares. Each square is a fourth of the sandwich. Four fourths make the whole sandwich.

Halves and Fourths: frequently asked questions

What is a half?

A half is 1 of 2 equal shares of a whole. When you cut a shape into 2 shares that are the same size, each share is a half. Two halves make the whole.

What is the difference between a fourth and a quarter?

There is no difference. Fourth and quarter are two names for the same share. Each is 1 of 4 equal shares of a whole.

Can halves look different?

Yes. A rectangle can be cut down the middle, across the middle, or corner to corner. If the 2 shares are the same size, each one is a half.

Why is a fourth smaller than a half?

Cutting a whole into 4 equal shares makes more pieces than cutting it into 2. When there are more equal shares, each share is smaller.

How many fourths make a whole?

Four fourths make one whole. If you eat 1 fourth of a pizza, 3 fourths are left. Put all 4 fourths back together and you have the whole pizza.