

# Equivalent Fractions

One half ( $1/2$ ) is the same as two fourths ( $2/4$ ).

What else is it the same as?

If you had a pizza with 8 slices and you ate half, how many slices did you eat? 4! Four is half of eight. One way to read fractions is 4 out of 8.

These are all the same amount:

- one half
- five tenths
- five out of ten
- 0.5
- 50%

$1/2$  ,  $2/4$  ,  $3/6$  ,  $4/8$  ,  $5/10$  are called equivalent fractions. Equivalent means equal. Those fractions are all one half. The top number is half of the bottom number. The denominator is two times the numerator.

When we change an equivalent fraction to its lowest terms, it's called *simplifying or reducing the fraction*. That just means we take  $5/10$  (five tenths) and call it  $1/2$  (one half). If you ate 5 out of the 10 cookies, you ate one half of them.  $5/10$  and  $1/2$  are the same amount.

One way to find an equivalent fraction is to multiply or divide the top and bottom numbers (the numerator and the denominator) by the same amount. You'll see this in the exercises.