



## Converting Fractions to Percents & Back

---

After watching this video lesson, you will learn how to turn any fraction into a percent and vice versa. You will learn how they are related and how to write your answers properly.

### Fractions and Percents

Meet Sheila! She owns the bakery around the corner. She bakes the most delicious sweet potato pies. They are so popular that people come from all over town just to get her pies. Every time she gets an order, the size of the order is yelled out in both fractions and percents.

**Fractions** are numbers that are made up of one integer divided by another integer. A **percent** means per 100. Both types of numbers are yelled out for the same order because some of her workers understand fractions better and some other workers understand percentages better. So, if both are yelled out, then everybody will be clear on what is needed for each order.

Oh look, here come a couple of customers. The first customer orders her pies using a fraction. She says she wants  $\frac{3}{4}$  of a pie. The second customer orders his pies using a percent. He says he wants 150% of a pie. Let's see how Sheila and her crew handle these different orders and how they convert the fraction to a percent and the percent to a fraction.

### Fraction to Percent

The first order came in as a fraction,  $\frac{3}{4}$ . So, how will Sheila and her crew handle this order and convert this fraction to a percent to yell out as well? The process to convert a fraction to a percent involves first dividing the fraction, and then multiplying by a hundred to find the percentage.

So first, Sheila and her crew perform the division that is stated in the fraction: 3 divided by 4. They get 0.75. Now they multiply this number by a hundred. This moves the decimal point two spaces to the right. They now get 75. So, 75% is the percentage equivalent to the fraction  $\frac{3}{4}$ . Now Sheila and her crew can yell out both  $\frac{3}{4}$  and 75% to get this order going.

## Percent to Fraction

The second order is a percentage, 150%. How will this be handled? To convert a percentage to a fraction involves putting our percentage in the numerator and 100 in the denominator and then simplifying. So, Sheila and her crew first write down  $150/100$ . Now they can go ahead and simplify this fraction.

To simplify, they look for numbers that both the numerator and the denominator can be divided by. Both 150 and 100 can be divided by 50. So, dividing both by 50, they get  $3/2$ . So, the fractional equivalent to the percentage 150% is  $3/2$ . Sheila and her crew can now yell out both  $3/2$  and 150% to get this order out the door.

## Another Example

Another customer has just arrived. This customer orders  $7/8$  of a pie for his order. Can you help Sheila and her crew and convert this number?

First, you notice that this number is a fraction, so you need to convert it into a percentage. This means that first you need to divide and then multiply by 100. Performing the division, you get 7 divided by 8 equals 0.875. Multiplying by 100 gives you 87.5. So, your percentage here is 87.5%. You did it! You yell out to Sheila and her crew that this customer wants  $7/8$  of a pie or 87.5% of a pie.

## Lesson Summary

Let's review what we've learned. **Fractions** are numbers that are made up of one integer divided by another integer. A **percent** means per 100. To convert a fraction into a percent, you take the fraction and you perform the division. Then, you multiply by 100 to find your percentage. To convert a percentage into a fraction, you put the percentage over 100 and you simplify.

## Learning Outcomes

You'll have the ability to do the following after this lesson:

- Define fraction and percent
- Convert between fractions and percents