

### What is a Percent? - Definition & Examples

Thinking in terms of pizza is an excellent way to think about percentages. Learn how it can help you understand percentages in this video lesson. You will also learn about the uses of percentages in the real world.

### What Is a Percent?

Picture a big pizza with your favorite toppings on it. Now, I like pepperoni, so mine has lots of pepperoni slices. Now picture the pizza being sliced into fourths, then eights, then sixteenths. Yum! My stomach's rumbling - is yours? Picture holding a slice of pizza in your hand, and you're holding a percentage of the pizza. So, a percentage, or **percent**, is a part of a whole. The word has its roots in the Latin language, from the phrase 'per centum,' which literally means 'per hundred.'

#### What Does It Mean?

We can think of a hundred as a whole, or all of something. A hundred percent of a pizza is the whole pizza. Half a pizza would be 50 percent, or half of a hundred percent. The percentage tells you how much of the whole you have.

If we divided our pizza into 100 little slices, then each slice would represent 1 percent of the pizza. This is another way to visualize percentages. You can take a whole of something and divide it into 100 little pieces and then figure out how many little pieces are in the portion you are interested in. If I wanted a quarter of the pizza, I would see that it would require 25 little slices out of 100, or 25 percent of the pizza.

It is definitely possible to have a percentage that represents more than a whole or more than a hundred of something. What if you had a friend with a very good appetite, and he happened to eat 2 whole pizzas? Let's visualize this. If we divided each pizza into our little 100 slices, how many slices did he eat? Yes, he would have eaten 200 little slices. That sounds like a lot, but your friend has a big appetite, and he's won several eating contests because of it. Anyway, if he ate 200 little slices, then he would have eaten 200 percent of one pizza.

We know that a hundred percent is a whole of something. Percents less than a hundred mean that they are less than a whole. Percents more than a hundred mean that they include a whole of something plus more of the something.

## Writing Percentages

There are three ways to write our percentages. We can use the mathematical percentage symbol, or we can write it in either decimal or fraction form. Let's take a look at how we can write 50 percent. Using the percentage symbol, it will look like 50%. The percentage symbol looks like two little zeroes with a slash separating them.

In **decimal form**, 50 percent is 0.50. In decimal form, 1 is the same as a 100%. In **fraction form**, 50 percent is 1/2. 1 in this form also means a 100%. If you divide 1 by 2, you will see that you get the decimal form of the fraction, 0.50.

Let's try writing 25 percent in the three different forms. Using the symbol, it's 25%. In decimal form, it is 0.25, and in fraction form, it is 1/4. Can you guess what 1 divided by 4 equals?

### Uses

Now that we know how to write percentages, let's talk about where in the real world you will encounter them. The first that I'm sure you are familiar with is in school, when the teacher hands back a graded test. What do you normally see in red? Yes, you see your grade or your test score. Most times, you will either see the percentage symbol or the fraction form. If you did really well on your test, you might see a score of 97% or 97/100 if there were 100 questions and you got 97 of them right.

Another place that you will see percentages is when you go shopping, either at a physical store or online. Many stores will have sales or special discounts that'll save you money. You might see your favorite shirt on sale for a 20% discount. Or, you might even see your favorite shoes on sale for 80% off. Which discount, the 20% or the 80%, will save you more money? That's right, the 80%, because that sale or discount means you only pay 20% of the cost of the shoes, where you would have to pay 80% of the cost of the shirt. The higher the percentage discount, the more you save.

### **Lesson Summary**

To review, **percentage** literally means 'per hundred;' you can also think of it as part of a whole. 100% is a whole of something. If you had more than a hundred, then you have more than a whole. You have a whole plus something more. If you had less than a hundred, then you only have a piece of the whole. The three ways to write your percentage are with the **percentage symbol** (%), in **decimal form** and in **fraction form**.

# **Learning Outcomes**

After this lesson, you will be able to:

- Define percentage
- Explain what it means to have 100% of something or more or less than 100% of something
- Understand the three ways to write percentages
- Identify real-world examples of when you would find percentages