

Percentage difference

First, you must pick a point of reference. Given two numbers, A and B, do you wish to compare A to B or B to A? This is important because, as we shall see, it makes a difference in the result you get.

Let's say that you have 100 jellybeans and your brother has 110. Compared to you, how much more does he have than you? In this case, the reference point is you; that is, your amount of jellybeans is the reference point because you want to know how much more HE has than YOU have.

He has 110, and you have 100, so he has 10 more than you ($110 - 100 = 10$). But you want to know how much more he has expressed as a percentage of what you have, so divide 10 (the difference between the two of you) by 100 (your amount). So, we have $10 / 100 = 0.1$. To convert the decimal to a percentage, just multiply it by 100. So, we have $0.1 \times 100 = 10\%$.

In other words, your brother has 10 percent more jellybeans than you do.

What if you wanted to know how much LESS you have than he has? In that case, you would divide the difference (still 10) by HIS amount (110). So, we have $10 / 110 = 1 / 11 = 0.091 = 9.1\%$.

In other words, you have 9.1 percent fewer jellybeans than he does.