Ratio and Proportion

They're Relatively Radical!

What even are they? A **ratio** is what we use when we want to compare one value to another — we're basically talking about how much of one thing there is, compared to another thing. **Proportion** is what we use when we want to compare a part of a whole or group of things TO the whole or group of things — it's basically just like a fraction.

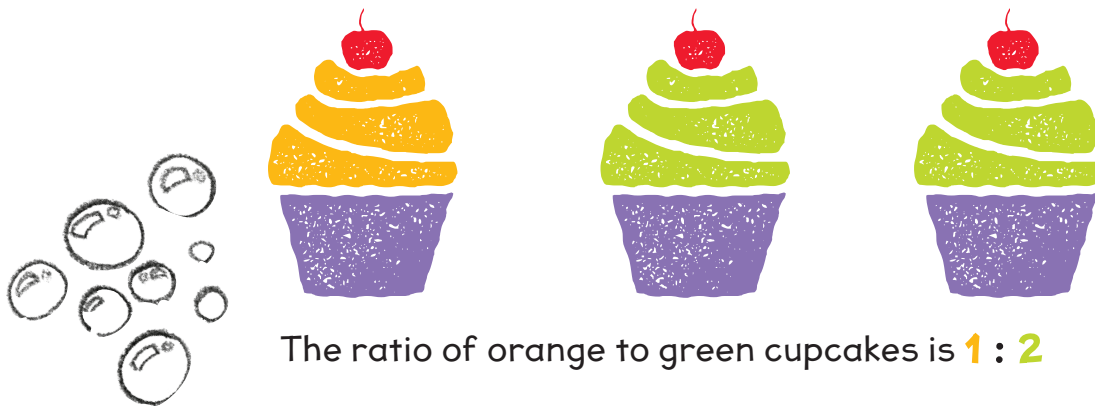The ratio of orange to green cupcakes is **1 : 2**

The ratio of green to orange cupcakes is **2 : 1**

The proportion of orange cupcakes to ALL of the cupcakes is **1 / 3**

The proportion of green cupcakes to ALL of the cupcakes is **2 / 3**

Say It Out Loud!

Ratios can be shown and stated in different ways. Let's look at those cupcakes again!

The ratio of orange to green cupcakes is **1 : 2**

We can use the : symbol to compare values: **1 : 2**

We can use the actual word "to" instead of the : symbol: **1 to 2**

We can use a fraction bar to compare values: **1/2**

Proportions can be shown and stated in different ways. Let's look at those cupcakes again!

We can use a fraction bar to separate the part from the whole: **1/3**

We read this out loud as **"one out of three"**

We can also convert our fraction into a percentage to show our proportion that way! **1/3 = 33%**