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Math Project

For my math project I have actually reconsidered my idea and decided instead of talking about Roman Aqueducts we will instead follow along in the spirit of my math logo and learn about how the Roman Numerals themselves work. As I pointed out on my Logo, we can eventually deduce what numbers are what and how they interact but only up to the number 50 the (L) character. I believe that it is important to know how these numbers work as they have been long since supplanted in our society by the Arabic-Indian number system which has the all important Zero the Romans lacked. That doesn't mean they don't show up from time to time whether it be in a film like "Star Wars" Episodes I-IX, sporting events like Superbowl LIX or even just as a passing notice on many public buildings as their dates of creation.

Now the numerals themselves are easy and I will explain. (I) is the number 1, (V) is the number 5, (X) is 10, (L) is 50, (C) is 100, (D) is 500, and (M) is 1000.

Unlike our base 10 system, the Egyptian base 10, or the Sumerian base 60 we use with keeping time, the Roman Numerals are more like representative counting and to be more exact it's a system of additions and subtractions with no true base number.

To begin counting we must now learn the rules and they are actually quite easy to grasp on their own but in practice are quite the headache!

The first rule is that no more than any three numerals of the same kind are allowed to be beside each other. So, for example (III) is 3 but (IIII) is not 4 since it breaks this rule. Y`ou may wonder, how the heck do we count to 4? Well, we use the number 5 (V) of course!

This leads into the second big rule for counting, addition and subtraction. When creating the number 4 we must add a new character (V) the number 5 to the (III) 3. In this case since (V) is a higher value than (I) we place (I) before (V) to get the numeral (IV). Doing this means the larger value character is subtracting the lower character behind itself. So (IV) is essentially the same as doing $-1+5=4$.

In the opposite way we have addition which adds the smaller number that is in front of a higher value number together. So (XVII) is (X) + (V) + (II) or in our system $10 + 5 + 2 = 17$.

The next rule is actually rarely used since numbers over 10000 were not typically used in the Roman record keepers' books. This rule is for multiplication and it fixes the issue so while intuitively you may think to make a number like 4000, we would use (MMM) and then (DD) to create (MMMDD). But no, we actually just use (IV) with a bar over top of them to show a multiplication of 1000. This saves us from ridiculously long strings of characters when using this system. Though occasionally a stone mason will just write (MMMM) or other numbers like this to save themselves the effort of multiplication which is a harder concept to grasp for the average plebian artisan than for a patrician aristocrat or us in the modern day.

This has been my presentation on Roman Numerals and I hope you got to enjoy learning them with me!