Let's look at the levels of measure of hierarchy we could have a qualitative variable. Which would be a nominal measure or an ordinal measure. Nominal data includes categories that have no particular order at all like your favorite car or perhaps which hand you choose to write with. While ordinal data add categories with a particular order military ranks are ordinal. Finishing positions in a particular race also ordinal.

Then we look at quantitative data. These are meaningful numerical values and generally you know that something is quantitative. If you can take a meaningful average of the values. Now if your data is quantitative it may be interval data or it might be ratio data for interval data. We mostly see this when we look at rating scales. Likert scales as well as temperature is also an interval measure. Ratio data adds an absolute true zero meaning the absence of something and then it also has meaningful magnitude like something can be twice as big as something else.

For example weight two hundred pounds is twice as much as one hundred pounds and zero pounds is the absence of weight. Those qualities interval data does not have. You know when you have quantitative data after you have identified whether it's interval or ratio then you also have to categorize as discrete or continuous. Now be careful. These are not quite the same definitions as Calculus. Discrete data is generally billed as something that you can count that is not being measured. Whereas continuous data generally involves a measurement where you can have a part of a part of a pound. If you were able to measure with a highly sensitive tool. Ratio could also have discrete counting values or continuous measured values. And that's the levels of measure measurement hierarchy.