An Introduction to Microeconomics
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Lecture – 45
Ordinary Vs. Cardinal Utility

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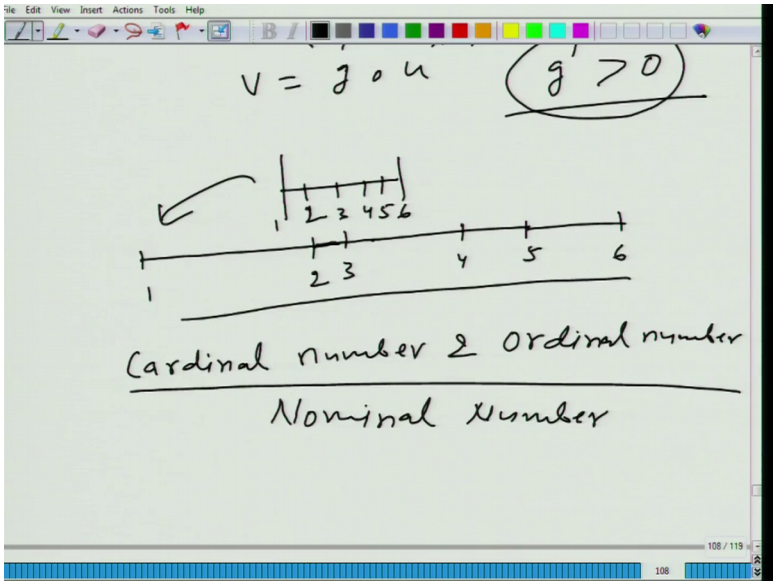

So, in other word what we are saying that these 1 2 3 4 5, the position they are representing the ranks, let me give you, let me digress little bit and I will come to that. Do you understand the concept of cardinal number?

Student: Cardinal number.

And ordinal number.

Student: Yes sir.

Let me make it little more general although that is not useful for particular utility chapter, but let me add another kind of a number; nominal number. See number can represent different things depending on the way we are using it. So, one way let us say when you see number 10 on Sachin Tendulkar jersey, I think it is number 10, does it mean that he has tenth (Refer Time: 01:10) that he bats becomes from batting at tenth position, no

Student: No

10 is just a name representing a number, representing sachin tendulkar in the match. In football any football player we are jersey it has a number, that number 7 you go out, because of some penalty what it means. The person who is wearing number 7 jersey should go out of the game. So, number here is representing name, nothing more nothing less, its just a name.

So, number is.

Student: Nominal

In that sense nominal.

Student: Nominal.

We call such numbers.

Student: Nominal.

Nominal numbers. The second kind is ordinal, let us say the 3 people took exam.

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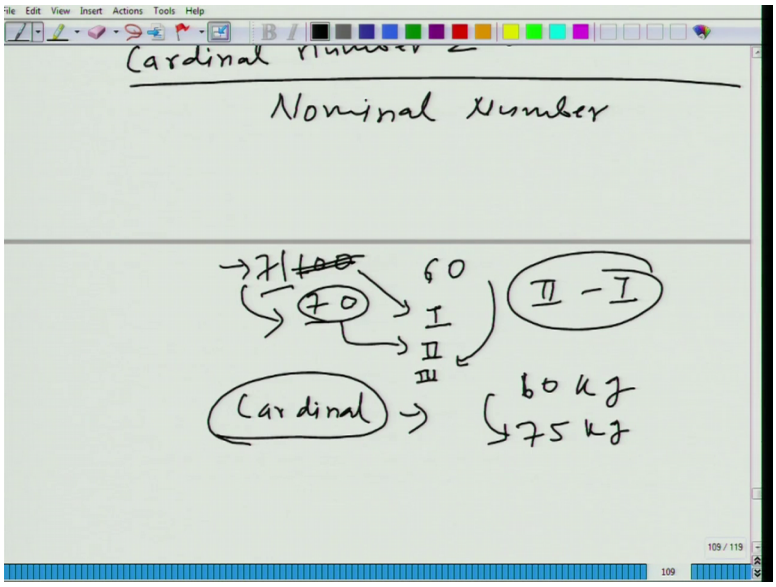

The first a person got 100, the maximum marks was 100, the second one got 70 and third one got 65.

So, what we can say or we say always that this person came first, this person came second and this person came third. Let us say instead of 65 that he had received.

Student: 100 and (Refer Time: 02:22)

60 what would be his rank third.

Student: Third

It would not change and let us say first person, if he had received 71, what would be his rank.

Student: First.

First. So, we cannot, what it means is, that second minus one is meaningless, it does not contain this information that what is that, how much is the difference. What information it contains? it contains the relative rank, that second is lower than first, but above third that is what it says, and cardinal we can say height or we can say weight, weight of a person is 60 kg another person has 75 kg, here the difference makes sense.

Student: hm

That second person is 15 kg.

Student: More (Refer Time: 03:19)

He is having 15 kg more.

Student: more weight.

Weight or here even when we talk in terms of marks 71 70 and 60, when we say that these are the marks, 71 is one mark more than 70. So, here we are talking about number in cardinal sense. This also gives the rank 75 is more than 60, 70 is more than 60 like that, it gives the rank, but it keeps more than rank, it also gives that intensity how much more, how big is the difference things like that.

So, in that sense I am talking about remember. Now let us come back to utilities, because we are not worried about these numbers, you know just thought the same of these numbers, what we are talking about is utility. So, come back to the utility function,

remember when we started talking about demand, and we started talking about diminishing marginal.

Student: value.

Value. So, there, although I did not mention, but again in the sense, a real sense when people were using this utility, they thought that utility is cardinal, it can be measured precisely. It cannot, it is not just you can measure it, you can also compare it.

Student: Compare it.

Among between two different person, but when we say the utility is ordinal, and then we say that you, the mister x likes coffee more than tea, it does not contain this information.

Student: How much.

That how much.

Student: How much.

How much more, and that is why it cannot, I cannot take the valuation of your utility and compare the valuation with his utility, because although we are using the number, but it would be wrong on our part, to use these numbers on the in the cardinal.

Student: Cardinal

Sense, at best we can use it in.

Student: Ordinal.

Ordinal sense, but earlier economists they were using these utility numbers utils in.

Student: Cardinal sense.

Cardinal sense, but here in this chapter we are using it in ordinal sense. Fine, is it clear?