And here we are back with the part four. And we'll continue our discussion of the supply curve. And we're going to look at movements along the supply curve and shifts of the supply curve. Now notice the shape of the supply curve, its shape slopes up into the right. And what that tells us, is that, if the price is low then the suppliers are going to want to supply a lot less of the item. And as the price increases, they'll supply a lot more. Lower price a lot fewer, higher price a lot more. And why is? Well if we look at the curve and think for a moment, what the supplier has is, relatively fixed costs in the short term. What this means is certain of the cost of production, such as, labor costs because the owner of the company can't come in and willy-nilly change the amount they pay each worker per hour, they can't do that on a daily basis, or you know every week or so change the amount per hour they pay the person. Sometimes take it down and sometime increase it, so normally in the short run whatever they're going to wage rate is that they're paying their workers that'll stay the same in the short run. Maybe in the long term they can adjust their wage rate but, in the short term it's normally fixed. Likewise, many other costs are fixed in the short term for example, let's say they're running a building to work in and they can't suddenly just walk away from that building, they're still committed to that rent for the period of time for their lease, so during the short run that's a fixed cost for them. Now, if they have these relatively sticky costs of production, if the price they can sell their product for goes up dramatically and well above their costs then, they will want to sell off a lot of that item. The higher the price the more they're going to want to sell, by the same token, because their costs are relatively sticky, if the price that they can get for their product goes down then, they're not gonna wanna supply nearly as many. They will supply fewer and fewer, and remember one of the main assumptions of supply and demand, a free market supply and demand, as we're discussing it here is, that there are many, many, many, buyers. None of which are so big and buy so many that they can control the price. At the same time, there are many, many, many, sellers. No one seller is so big that they can control the market. Or set the price if you will. Everyone is pretty much constrained by what the free market price ends up being. They have to respond to it that way. We've already seen the movement along the supply curve and that happens only on the basis of a price change. How do we accomplish a shift in the supply curve? Very similar to a shift in the demand curve. First, we'll start off with some data. In this case, the data is going to be a situation where there's going to be less supplied at every price. We see that here at $11, now we will supply 11,000,000, were before we were supplying 11,000,000 at $9. At $9 were only going to supply 9, 000,000, so we'll let it go through its system and you notice that at $9 a pound we had less supplied at every at that price. At 7,000,000, there's less supplied at 5,000,000 there's less supply, at the 3,000,000 there's less supplied, and at 1,000,000 we don't even have data for that now in the new supply curve, and we label that supply curve "S2." Now we have a shift where less is supplied at every price. Why did that shift occur? Well, the reasons are it could have been because there were fewer suppliers in the market place, so if a lot of suppliers quit the business, the suppliers that are left will be supplying less at every price. There may be other increases in the cost of some of the inputs. In the case of coffee beans let's assume that fertilizer is an expense of production, cost of production, of coffee beans and if the cost of fertilizer goes up dramatically then, suppliers will be supplying less coffee beans at every price because their cost of production just went up. Use the example of worsening technology. There isn't really a situation where you have worsening technology sidelined through it. Normally technology improves. But there could be some kind of a catastrophe similar to the Haiti earthquake of December of 2009, where the entire infrastructure of the island was completely obliterated, all the buildings and everything else. Therefore, there might be a throwback in technology because

of something like that. But it would cause less to be supplied at every price. A change in the expectations of the suppliers could cause them to supply less at every price. An example might be if they're expecting a recession where there's going to be a lot less demand then, in general the suppliers will try to cut back their production early to minimize their costs and their exposure and therefore they'll be supplying less at every price. Then, finally if there was a change in the cost of a related product, now this is a little different than what we were talking about in the demand side. Here we're talking about the supplier can make either product. In that we use the example for just a moment of gasoline or heating well, they get a barrel of crude oil and they can refine that barrel of crude oil either into gasoline or into heating oil but, they can't make it into both things. Therefore, if the price of the heating oil goes up dramatically then, probably refiners are gonna make less gasoline and more heating oil. Well the same thing would be true of our coffee beans, if our growers could grow some other product on their land and the price that they could get for that product goes up dramatically then, they're probably going to supply a lot less of the original product. If there if there was a substitute product that they could produce on the land rather than coffee beans, and it was gonna return them an awful lot of money they'd probably give up production of the coffee beans and there'd be less coffee beans at every price. We'll continue this discussion in the next part. Thank you.