Week 3 DQ 1 LIFO versus FIFO

This exercise is designed to walk you through how to complete inventory problems. We learned about different cost assumptions and inventory management systems but the goal each of these problems is always going to be the same: what did the stuff that I sold cost namely what is cost of goods sold and what is the value of stuff that I still have left, namely what is my ending inventory.

So let's actually get started by examining a set of purchases and sales. Note that I call purchases made at the same time lots. So let's go through the perpetual method first. The trick to the perpetual method is to keep track of your current inventory balance by stacking the different lots in the order you purchased them. I actually recommend setting up four columns and doing a problem like this: a column for the day af the transaction; a column for your purchases, a column for your sales, and a column to keep your running totals.

Next for each year transactions, in this case we have five, you want to write in your purchases including both the quantity and purchased price, as well as your sales. But you only include quantities for now. Let's go ahead and do that so this exercise says that we started off with two items which cost ten dollars apiece and then we made a couple purchases. We made one November 1st and that purchase involved three units and those were eleven dollars apiece and we made another purchase on November 7 and that is also for three items but those cost twelve dollars apiece.

Now we're going to leave the sales prices alone for now so we made one sale on November 3rd and that was 42 units, and he's made another sale on November 9th and that was a sale of one unit. Let's start work on our running totals and that's going to help figure out which items were actually sold. So at the beginning we know that we're just starting the balance in these two units. Next when we make that first purchase we still have those two units worth ten dollars apiece but we also now have these additional three units that are worth eleven dollars apiece so we're actually going to start out with five.

The only difference between FIFO and LIFO is whether you pull each sale from the top or the bottom. So under FIFO we're going to pull from the top and we'll see later that we're going pull from the bottom under LIFO. So let's take this sale on November 3rd. At this point we have five items, two from the older lot at ten dollars each, and three from the new lot at eleven dollars each. Since we are using first in first out we're going to pull from the top and we're going to assume that the older two items were sold. So at this point we're going to say that those ten dollar items were sold and now our balance is only those three that are worth eleven dollars each.

Next we update our balance for the new purchase on November 7 keeping things in order so now we have those three units at eleven dollars apiece, but now we have another three in at twelve dollars each. For the sale on November 9th we're going to again pull from the top and the oldest items are the ones that cost $11 now so that's going to be where the sales come from. That is one of those units worth eleven dollars and now we're left with is two of those units that we purchased for eleven dollars each and we still have those three worth twelve dollars apiece.

So we're going to prepare some sort of summary, we can say that for sales we sold three units and those cost 31 dollars total and our balance is that we have five units left, two that cost $11 dollars and three that cost $12 dollars and the ending inventory value is $58.