Purchase Discounts and Inventory

You're at Loafe Cafe for an afternoon pick-me-up. As you were picking up your order, the manager, Tom, came out from the back. He asks you for a favour. He just got off the phone with one of their key suppliers and got the good news that Loafe has a discount from their coffee bean supplier. He tells you that they just got a **"four-eight, net thirty" discount** for their incoming $3000 shipment. Tom wants to know whether this is a good deal, and how it would look on Loafe's financial statements. Can you help him out?

Many businesses order inventory and materials from their suppliers on account. For their suppliers, getting paid sooner is better because it means cash in hand, that can be used for other things. Suppliers give discounts for early payment to encourage this. Usually these types of discounts --- we'll refer to them as supplier discounts --- are defined by **credit terms set out by the supplier**. Credit terms are usually written as: *(see video)*

Although there are multiple ways to write them down, credit terms are read aloud like "four-eight, net thirty". The numerator in the first fraction refers to the discount percentage offered by the seller. The denominator refers to the number of days left to take advantage of the discount. This number is calculated from the invoice date. The "n" in the second fraction stands for "net", meaning the total amount outstanding. The denominator indicates the number of days the buyer has to pay the original, undiscounted amount. Sometimes you will simply see the second term by itself. This means there is no supplier discount available, and the balance is simply due in that number of days.

Going back to the example, Tom's supplier is offering him a four-eight, net thirty discount, which means he will received a 4% discount on this month's order of coffee beans if he pays the amount within 8 days, otherwise he will be required to pay the full, undiscounted price within 30 days.

A typical credit term is "two-term, net thirty," meaning that there is a 2% discount if the amount is paid within 10 days, otherwise the buyer will have to pay the full amount within 30 days of the original invoice date.

Now that you know a little bit more about credit terms and the industry standard, here's a bonus question for you to consider: Did Tom get offered a good deal? How good of a deal is it?

Understanding the discount offered by the supplier more clearly now, Tom asks you to show him the journal entries he will have to keep. Today is November 1st, and he tells you that they will be purchasing $3000 worth of coffee beans from this supplier this month.

Remember that the discount he was offered was "four eight, net thirty":

Say Tom is able to make the payment on November 5th, within the eight days as in the term, how does this translate into our accounting journal?

Well, on November first, he buys the inventory for $3000 on account, increasing the inventory balance and accounts payable account balances. This will go into the ledger as a **debit to the Inventory account and credit to the Accounts Payable account.**

If Tom pays within eight days of the invoice date, on November fifth, he gets the discount. Four percent of $3,000 is $120, meaning Tom only has to pay $2,880 in cash for the coffee beans. Since we recorded the original payable for $3,000, we need to represent the discount somehow. In this case, Loafe uses a perpetual inventory system so Tom needs to credit Inventory for the amount of his discount to make the entry balance.

However, Tom remembers that his manager is on vacation until November 13th, and he won't be approved to pay the actual amount in cash until then. If that's the case, what will the journal entry look like instead?

In that case, he won't qualify for the sales discount and will have to pay the full amount in cash on November 13th, because he won't be able to make the invoice payment until after the 8-day credit term.

Tom is happy now that he understands how the discount works and wonders if Loafe could also use discount terms to incentivize their customers to pay faster. He tells you that Loafe will supply $700 worth of coffee and muffins for an upcoming Career Conference. He also tells you that his manager wants to receive the cash within a week (7 days), and the maximum discount he could offer is 3%, if not paid within a week, then it must be paid within 30 days.

What would the credit terms look like? Pause, and try it for yourself, and resume when you have an answer.

The credit terms would be three-seven, net thirty.

Now think about what the journal entry would look like from Loafe's perspective, remember that they are now the supplier. Let's assume the Career Conference organizers pay Loafe 4 days after their purchase on account.

Pause the video and resume when you are done.

Because the Conference organizers pay within the discount period, they will receive a $21 discount, which is 3% of the $700 original price, and will only need to pay $679.

After you helped Tom with the accounting, you took your beverage; and just when you were about to leave, something caught your eye. You noticed that there was a display of new merchandise in the corner. Tom told you that it was the first ever shipment of coffee beans from South America and it just came in this morning. Knowing that means Loafe has to begin accounting for freight costs and returns, you decide to do a quick review for Tom.

Because businesses often ship goods to and from each other, we need a way to determine who owns the goods at what point in their journey. That is, we're mainly worried about whether these goods belong on our books, or those of the supplier. This is where the concept of "free on board" or "FOB" comes in. FOB comes in two types: FOB shipping point (also known as FOB origin), and FOB destination.

FOB for goods is always looked at through the perspective of the supplier. Let's first look at FOB shipping point, and assume we are shipping some coffee beans to our client, Loafe Cafe. If our goods are FOB shipping point, ownership of the beans is transferred to Loafe at the shipping point. In other words, the beans are "**freed from our control**" when they are "**on board**" the **shipping point**. Therefore, Loafe owns the coffee beans the moment the coffee beans are shipped out from the supplier's warehouse and the beans belong on Loafe's books at that point.

Because Loafe, as a buyer, "owns" the beans at the shipping point, they are responsible for shipping costs. **Freight costs paid by buyers are considered part of the cost of merchandise purchased,** because total inventory cost should include every cost associated with acquiring the inventory. When the inventory is in turn sold, this **freight costs will be part of the Cost of Goods Sold**. As the supplier, we have one journal entry to record the delivery of goods at the shipping point. Loafe, however, records both their inventory purchase and the additional freight costs to the Inventory account.

The other type is **FOB destination**. In this case, Loafe only "owns" the beans once they have arrived at their destination, which is Loafe Cafe. In other words, the beans are "**free from our control**" when they are "**on board to their destination**". Thus, the beans only belong on Loafe's books when they arrive, and the seller pays for shipping. Freight costs incurred by the seller on the inventory sold becomes an operating expense recorded in the supplier's books. Suppliers usually have an account named "Freight-Out", which increases as freight costs are incurred. When the shipping cost is covered by the seller, this usually means the original product becomes more expensive to cover the freight costs. If we are selling beans to Loafe FOB destination, we make two journal entries: one to record the sale of beans, and one for the shipping costs we pay. Loafe only needs to record one journal entry for the beans they bought.

Tom informs you that the new merchandise was delivered FOB shipping point. Loafe paid $40 for the new merchandise and $20 for its shipping costs, both on account. He asks you how these transactions should be journalized.

Tom thanks you for explaining the concepts of Freight costs and offers you a free coffee, freshly made with the new beans in the merchandise that Loafe just received.

However, when you return to Loafe the next day, Tom frantically tells you that the coffee beans from the day before were damaged and don't meet Loafe's quality standards. He asks you for advice on what he should do. You help Tom by calming him down and advising him the two ways he can handle the situation.

One way is to return the defective product. Assuming Loafe uses the perpetual inventory system, he would credit Inventory and debit accounts payable for the amount of coffee beans he is returning.

However, this leaves Tom with no beans at all. If Tom can find a use for the defective beans, for example to make Tiramisu, the alternative is for Tom to ask the supplier to grant a purchase discount as compensation. That way the beans will not have to be returned. A purchase allowance is a discount for faulty goods, and it requires journaling the portion of the cost that is discounted to the Purchase Allowance. In this example, if the seller opted to give Tom a 25% discount on the faulty beans, Tom would credit 25% of the cost of inventory to the Purchase Discount, and credit the remaining 75% to the cash account when settling the payment made on Accounts Payable.

Tom tells you that the coffee beans cost $400, so the supplier grants a $100 discount.

For **returns in perpetual inventory systems,** there are two journal entries required. The first entry records the monetary or payment return. Merchandising companies have a contra-revenue account called "Sales Returns and Allowances," that they employ for this purpose. They will debit the Sales Returns and Allowance account to increase it, and credit the accounts receivable to decrease the amount they are expecting to get paid, now that their items are being returned.

The second entry will record the return of the physical inventory, which they debit the inventory account and credit the Cost of Goods Sold account to reflect. Thus, sales return and allowances from the seller's perspective under the perpetual system look like the following: *(see video)*

Under the periodic system, returns and Allowances only require one entry at the time of the return, as the inventory adjustment will be made at the end of the period all at once:

Whew, thank you for helping Tom out again! He's learned so much from you, Loafe will surely be in good hands. We learned how to account for freight costs, returns, sale discounts and allowances. Remember that the concepts we went over today are specific to the perpetual inventory system.