

**Chapter 5, Module 5**

**Slide 1**

The slide content is enclosed in a black rectangular border. At the top, a dark grey horizontal bar contains the text "Chapter 5 Module 5" in a white, italicized serif font. Below this, the text "AMIS 211" and "Introduction to Financial Accounting" is centered in a black serif font. Underneath, "Professor Marc Smith" is centered in a smaller black serif font. The Fisher College of Business logo is centered below the text, featuring a square with "T H E OHIO STATE UNIVERSITY" and the word "FISHER" in a large serif font, with "COLLEGE OF BUSINESS" underneath. At the bottom of the slide, there is a light grey horizontal bar above a dark grey horizontal bar.

Hi everyone. Welcome back.

Now that we have done one example of the Cash Flow Statement, let's do another. Because: this one really can be kind-of challenging and it does need some practice.

So, let's take a look at Example #2 from the Web site problems.

Let's just read it together.

Here is what it says:

“The following information was taken from the 2003 Income Statement of Betty DiRose Inc.”

So, you can see Betty's Income Statement for 2003. And then, below, they give us the Balance Sheets as of the end of 2003 and 2002.

It is set up just like the first example that we did, where we worked through the Cash Flow Statement.

Then, they give us an additional piece of information there at the bottom in bold:

**“A parcel of land costing \$22,000 was purchased for cash during 2003.”**

**“Prepare the Cash Flow Statement for Betty for 2003.”**

Let’s do this!

And, in this Module, let’s just work through the Operating Activities because those are the most involved.

So, let’s go ahead. And, we will set it up for both Direct and then Indirect, just so we can get some practice.

So, let’s go ahead to the next slide and let’s jump right into it.

## Slide 2

| <i>Chapter 5 Module 5: Example #2</i>                                     |                                       |
|---|---------------------------------------|
| <b>Accounts Receivable</b>  |                                       |
| 36,000  |                                       |
| Sales Revenue<br>500,000  | Cash Collected<br>From Customers<br>X |
| 40,000  |                                       |
| $36,000 + 500,000 - X = 40,000$ $X = \text{Cash Collections} = \$496,000$ |                                       |

And, let's start with the Direct Method.

Remember: we are going to go right down the Income Statement.

For each item on the Income Statement, identify the corresponding Balance Sheet account, draw a T-Account, and force out the cash effect.

We start:

The first account on the Income Statement is Sales Revenue. It corresponds to Accounts Receivable on the Balance Sheet.

Let's enter in the Beginning Balance and the Ending Balance given to us in the Balance Sheets there in the middle of the page.

There are questions you have to ask yourself:

“Why would Accounts Receivable go up? What would cause an increase in Accounts Receivable?”

The reason we would have more Accounts Receivable is we make more sales.

So, the Sales Revenue number—the number from the Income Statement—the Accrual number—that increases the Receivables. You put it on the debit side.

“Why would Accounts Receivable go down? What would cause the decrease?”

We collect our cash. When our customers pay us, the Receivable goes down. They do not owe it to us anymore. They have actually given us our money.

So, now, we can set up our Algebra equation:

Beginning Balance plus (+) the Sales that we made; minus (-) the cash we collected from our Customers (“x”); is equal to (=) the Ending Balance.

We solve for “x.”

It looks like we collected \$496,000 of cash from our customers during the year.

Hopefully, this looks familiar to you. This is the same process we did when we did the first example. And, it will always be the same process.

The Cash Flow Statement, in this respect, is rather procedural. We want to get that process down.

Let’s go to the next slide and look at the next item on the Income Statement.

## Slide 3

| <i>Chapter 5 Module 5: Example #2</i>  |  |
|--|--|
| <b>Inventory</b>   |  |
| <div style="border-top: 2px solid black; border-bottom: 2px solid black; padding: 5px 0;"> <p><b>42,000</b></p> <p><b>Purchases</b></p> <p><b>X</b></p> </div> | <div style="border-top: 2px solid black; border-bottom: 2px solid black; padding: 5px 0;"> <p><b>Cost of<br/>Goods Sold</b></p> <p><b>300,000</b></p> </div> |
| <div style="border-top: 2px solid black; padding: 5px 0;"> <p><b>50,000</b></p> </div>   |  |
| $42,000 + X - 300,000 = 50,000$ $X = \text{Inventory Purchased} = \$308,000$   |  |

Cost of Goods Sold (CGS):

It matches up to the Inventory on the Balance Sheet, right? Inventory is the cost of the goods that we sold to customers.

We enter in the Beginning and the Ending Inventory Balance.

Now, ask yourself: “Why would Inventory go up? Why would we have more?”

Well, because: we go out and we make purchases.

“Why would Inventory go down? What causes us to have less inventory?”

Well, we sell it! So, the Cost of Goods Sold (CGS) is the decrease to the Inventory account.

Now, we set it up and do the Algebra equation just like previously.

And, we can figure out that we purchased \$308,000 of inventory from customers.

I have a question for you:

Why can't we stop here?

Why is it that this calculation—this cash calculation related to Cost of Goods Sold—why does it have two steps?

Why can't you stop here?

Well, you know that you purchased \$308,000 of inventory. That does not tell us if we actually paid cash or not. It is very likely some of these purchases were made on account.

So, you have to go through a two-step process.

Step 1: Analyze the Inventory account to find out how much inventory was purchased.

Go to the next slide.

## Slide 4

| <i>Chapter 5 Module 5: Example #2</i>   |  |
|---|--|
| <b>Accounts Payable</b>   |  |
| Cash paid to<br>suppliers<br>X  | 64,000<br><br>Purchases of<br>inventory<br>308,000 |
|   | 58,000   |
| $64,000 + 308,000 - X = 58,000$<br>$X = \text{Cash Paid for Inventory} = \$314,000$ |  |

And, Step 2: is to analyze the Accounts Payable account. We need to figure out how much of those purchases have been paid for in cash.

Because, remember: that is what we are after; the Statement of Cash Flows just wants to know the cash in and the cash out.

Accounts Payable:

Enter in the Beginning and Ending Balances given to us in the problem.

Accounts Payable goes up. We owe more money because of the purchases we made.

We just calculated that number on the previous slide: \$308,000.

Our Liability goes down—Accounts Payable decreases—when we actually make payments.

That is the cash flow, here. The cash that we pay to our Suppliers actually reduces our Liability.

Set up the Algebra equation. Solve for “x.”

The cash paid to our Suppliers is: \$314,000.

That one is tough because that requires two steps. Everything else is just a one-step process. But, this one goes through two. And, a lot of folks tend to forget about that second step.

Make sure you are comfortable with that.

So, we say: “Okay!”

The next item on the Income Statement is Depreciation.

What are we going to do with that one?

We are going to ignore it, right?

Depreciation is Non-Cash. It does not have a cash effect. So, we can ignore it in our calculations.

What about the next one? What about the Loss on the Sale of the Land?

Hey! This is another Non-Cash item. We ignore it. There is no cash effect involved or related to that Loss.

So, Depreciation, Losses, and Gains—if you have any—are all Non-Cash items that are all ignored when we do the Direct Method for the Operating Activities.

So, we go to the next expense—the next item on the Income Statement—Salaries Expense. You have to pay cash for that.

It matches up with which Balance Sheet account?

Go to the next slide.

## Slide 5

| <i>Chapter 5 Module 5: Example #2</i>   |  |
|---|--|
| <b>Salaries Payable</b>   |  |
| <b>Cash paid for salaries</b><br><b>X</b>                                     | <b>10,000</b>                            |
|   | <b>Salaries Expense</b><br><b>50,000</b> |
|   | <b>12,000</b>                            |
| $10,000 + 50,000 - X = 12,000$ $X = \text{Cash Paid for Salaries} = \$48,000$ |  |

It matches up with Salaries Payable, right? Salaries Expense corresponds with Salaries Payable.

Enter in the Beginning and Ending Balances.

Salaries Payable goes up. We owe more money when our employees do more work.

So, the Salary Expense increases what we owe to our employees.

Salaries Payable goes down when we actually pay the cash to those employees. That is the decrease, here.

So, it is the same process, right?

We set up our Algebra equation. We solve for "x."

So, we can determine the cash that was paid to our employees for salaries was \$48,000.

The next item on the Income Statement is Income Tax Expense.

It matches up with...which Balance Sheet account?

Go to the next slide.

**Slide 6**

| <i>Chapter 5 Module 5: Example #2</i>                                       |                            |
|---|----------------------------|
| <b>Income Taxes Payable</b>   |                            |
|   | 9,000                      |
| Cash paid for taxes<br>X  | Inc. Tax Expense<br>32,000 |
|   | 6,000                      |
| $9,000 + 32,000 - X = 6,000$<br>$X = \text{Cash Paid for Taxes} = \$35,000$ |                            |

It matches up with Income Tax Payable.

It is the same process:

Enter in the Beginning and Ending Balances.

The Income Taxes Payable—the Liability—goes up; it increases when we incur taxes.

So, the Income Tax Expense increases what we owe to the government.

The Income Tax Payable goes down—or decreases—when we actually pay the cash for those taxes.

That is the number we are after here: the cash flow.

We set up the Algebra equation. We solve for “x”—the amount of cash paid for taxes—to be \$35,000.

And, we are done!

There are no more items on the Income Statement to deal with. We have dealt with every Operating Activity in this problem.

So, simply go to the next slide.

### Slide 7

| <i>Chapter 5 Module 5: Example #2</i>     |               |                |
|---|---------------|----------------|
| Cash collected from customers             |               | 496,000        |
| Cash payments:                            |               |                |
| to suppliers for inventory purchases      | 314,000       |                |
| to employees as salaries                  | 48,000        |                |
| to the government as taxes                | <u>35,000</u> | <u>397,000</u> |
| Net cash provided by operating activities |               | 99,000         |

And, there is what the Operating Activities—prepared using the Direct Method—would look like.

Cash collections from customers: \$496,000. And then, we had cash paid to purchase inventory, cash paid to our employees for salaries, and cash paid to the government for taxes; giving us a Net Cash Provide by Operating Activities of \$99,000.

Now, that is the Direct Method.

Let's see if we can do the Indirect Method as well.

In fact, what would be just wonderful is: if you were just to pause me for just a couple of moments. Pause the Module. And, write out for yourself the Indirect Method.

See, if you can write it out and get to—it should give you the same number—see if you can write it out and get to Net Cash Provided by Operating Activities of: \$99,000.

If you don't get it right; you don't get it right.

That is not the issue.

Give it a shot! See if you can do it!

Once you have done that, turn me back on.

And, let's go the next slide.

## Slide 8

*Chapter 5 Module 5: Example #2*

|  |         |        |
|--|---------|--------|
| Net income   |         | 48,000 |
| Adjustments to reconcile net income to cash flow from operations |         |        |
| + Depreciation expense   | 60,000  |        |
| + Loss on sale of land   | 10,000  |        |
| - Increase in accounts receivable                                | (4,000) |        |
| - Increase in inventory  | (8,000) |        |
| - Decreases in accounts payable                                  | (6,000) |        |
| + Increase in salaries payable                                   | 2,000   |        |
| - Decreases in income taxes payable                              | (3,000) | 51,000 |
| Net cash provided by operating activities                        |         | 99,000 |

And, here, on this last slide, you can see what the Indirect Method would look like.

You start with Net Income.

The first adjustment we always make is: we add (+) back Depreciation Expense.

We also add in (+) any Losses. And, we did have a Loss on the Sale of Land.

If it existed, we would subtract (-) Gains. But, there weren't any Gains in this problem.

We, then, make those adjustments for Current Assets and Current Liabilities—in this case, our Accounts Receivable and Inventory. Both Current Assets increased from beginning to the end of the year—the balance went up. That increase amount should be subtracted (-).

We had three (3) Current Liabilities:

The Accounts Payable and the Income Tax Payable both decreased. The amount of that decrease is a subtraction (-). You subtract (-) that in this calculation.

The Salaries Payable account, however; it actually increased during the year. The amount of that increase is added (+) in this adjustment to reconcile Net Income to Cash.

When you go through all of that, the Indirect Method will show you the same number as the Direct Method: Net Cash Provided by Operating Activities is \$99,000.