Access the Rest of the Fundamentals Course

Financial Modeling Fundamentals Modules 2 and 3: Accounting and the 3 Financial Statements – How to Walk Through Interview Questions

Table of Contents:

Key Rule #8: How to Walk Through Accounting Interview Questions 2

Key Rule #8: How to Walk Through Accounting Interview Questions

Some of *the* most common interview questions are the ones about how a change affects the 3 financial statements.

For example:

- "Depreciation goes up by $10. What happens on the statements?"
- "A company buys $100 of Inventory. What happens on the statements?"
- "A company sells a factory that's worth $100 on its Balance Sheet for $120. What happens on the statements?"

For all these questions, you should look at our 3-statement "interview question" model.

The best way to understand these changes is to enter them in Excel and see firsthand how the statements change.

With that said, we also wanted to give you **rules of thumb** you can use for the **5 major categories of changes**:

1. Changes to True Cash Items on the Income Statement.
2. Changes to Non-Cash or Re-Classified Items on the Income Statement.
3. Changes to Operational Items on the Balance Sheet.
4. Changes to Non-Operational Balance Sheet Items or Cash Flow Statement Items.
5. Multi-Step Scenarios and Changes on the Financial Statements.

In the sections below, we'll explain each category using screenshots and examples.

We recommend going in this order when answering these questions:

1. Explain how the Income Statement changes, if at all.
2. Explain how the Cash Flow Statement changes, if at all.
3. Explain how the Balance Sheet changes and why it still balances, i.e. why Assets still equal Liabilities + Equity.

1) Changes to True Cash Items on the Income Statement

For example, what happens if a company's **revenue** increases by $100, or its COGS or Operating Expenses increases by $100?

This category is **easy** because you don't have to modify anything on the Cash Flow Statement.

All that happens is that revenue or expenses on the Income Statement change, Net Income changes, and Cash and Retained Earnings on the Balance Sheet change.

Here's an example of what happens when revenue increases by $100:

Income Statement	Current Period: Before Changes:	Current Period: After Changes:
Revenue:	$ 1,300	$ 1,400
Cost of Goods Sold (COGS):	100	100
Gross Profit:	1,200	1,300
Operating Expenses:	200	200
Depreciation:	-	-
Stock-Based Compensation:	-	-
Amortization of Intangibles:	-	-
Operating Income:	1,000	1,100
(+) Interest Income:	-	-
(-) Interest Expense:	-	-
Gain / (Loss) on Sale of PP&E:	-	-
Gain / (Loss) on Sale of ST Inv.:	-	-
(-) Goodwill Impairment:	-	-
(-) PP&E Write-Down:	-	-
Pre-Tax Income:	1,000	1,100
Income Tax Provision:	400	440
Current Portion of Taxes:	400	440
Deferred Portion of Taxes:	-	-
Net Income:	600	660
(-) Preferred Dividends:	-	-
Net Income to Common:	$ 600	$ 660

Balance Sheet	Beginning of Current Period:	End of Current Period: Before Changes:	End of Current Period: After Changes:
Assets:			
Current Assets:			
Cash & Cash-Equivalents:	$ 100	$ 700	$ 760
Short-Term Investments:	100	100	100
Accounts Receivable:	100	100	100
Prepaid Expenses:	100	100	100
Inventory:	100	100	100
Total Current Assets:	500	1,100	1,160
Long-Term Assets:			
Plants, Property & Equipment:	1,000	1,000	1,000
Other Intangible Assets:	300	300	300
Long-Term Investments:	100	100	100
Goodwill:	100	100	100
Total Long-Term Assets:	1,500	1,500	1,500
Total Assets:	$ 2,000	$ 2,600	$ 2,660
Liabilities & Equity:			
Current Liabilities:			
Revolver (Short-Term Debt):	$ 100	$ 100	$ 100
Accounts Payable:	200	200	200
Accrued Expenses:	200	200	200
Total Current Liabilities:	500	500	500
Long-Term Liabilities:			
Deferred Revenue:	200	200	200
Deferred Tax Liability:	200	200	200
Long-Term Debt:	100	100	100
Total Long-Term Liabilities:	500	500	500
Total Liabilities:	$ 1,000	$ 1,000	$ 1,000
Equity:			
Shareholders' Equity:			
Common Stock & APIC:	600	600	600
Treasury Stock:	(100)	(100)	(100)
Retained Earnings:	300	900	960
Accum. Other Compr. Income:	100	100	100
Total Shareholders' Equity:	900	1,500	1,560
Preferred Stock:	100	100	100
Total Equity:	$ 1,000	$ 1,600	$ 1,660
Total Liabilities & Equity:	$ 2,000	$ 2,600	$ 2,660
Balance Sheet Balanced?	OK!	OK!	OK!

For this question, you could probably *skip* the Cash Flow Statement because all that happens is that Net Income increases by $60 and Cash at the bottom increases by $60.

If expenses increased by $100 instead, the opposite would happen, and Net Income, Cash, and Retained Earnings would all be down by $60.

Here's a summary of what happens:

- **Examples:** Revenue, COGS, Operating Expenses, and Interest Income / (Expense).

- **What Changes as a RESULT of These Items Changing:** Pre-Tax Income, Net Income, Cash, and Retained Earnings.

- **How the Balance Sheet Balances:** Cash and Retained Earnings both change.

2) Changes to Non-Cash or Re-Classified Items on the Income Statement

These changes follow a set pattern: Pre-Tax Income and Net Income change, but you add back or subtract the change on the Cash Flow Statement.

Cash and Retained Earnings change, and then something else on the Balance Sheet also changes. The tricky part is what that "something else" is, but it is usually intuitive.

The classic example is **Depreciation**, but they could ask about plenty of other items in the same category: Amortization, Stock-Based Compensation, or an Asset Write-Down.

Here's a list of non-cash items and what they match up with on the Balance Sheet:

- Depreciation – PP&E.
- Amortization – Other Intangible Assets.
- Stock-Based Compensation – Common Stock & APIC.
- Gains / (Losses) on PP&E – PP&E.
- Write-Downs – The Asset you are writing down.
- Impairment Charges – The Asset you are impairing.

Here's what the classic question about Depreciation increasing by $10 looks like on the right:

You record the $10 extra of Depreciation on the Income Statement, which reduces the company's Pre-Tax Income by $10, and its Net Income by $6 (assuming a 40% tax rate).

Don't even mention Operating Income – just simplify it and say Pre-Tax Income declines by $10.

And then here are the Cash Flow Statement and Balance Sheet:

Income Statement	Current Period: Before Changes:	Current Period: After Changes:
Revenue:	$ 1,300	$ 1,300
Cost of Goods Sold (COGS):	100	100
Gross Profit:	1,200	1,200
Operating Expenses:	200	200
Depreciation:	-	10
Stock-Based Compensation:	-	-
Amortization of Intangibles:	-	-
Operating Income:	1,000	990
(+) Interest Income:	-	-
(-) Interest Expense:	-	-
Gain / (Loss) on Sale of PP&E:	-	-
Gain / (Loss) on Sale of ST Inv.:	-	-
(-) Goodwill Impairment:	-	-
(-) PP&E Write-Down:	-	-
Pre-Tax Income:	1,000	990
Income Tax Provision:	400	396
Current Portion of Taxes:	400	396
Deferred Portion of Taxes:	-	-
Net Income:	600	594
(-) Preferred Dividends:	-	-
Net Income to Common:	$ 600	$ 594

Cash Flow Statement

	Current Period: Before Changes:	Current Period: After Changes:
Operating Activities:		
Net Income to Common:	$ 600	$ 594
Non-Cash Expenses & Other Adjustments:		
(+) Depreciation:	-	10
(+) Stock-Based Compensation	-	-
(+) Amortization of Intangibles	-	-
(+) Deferred Income Taxes:	-	-
(Gain) / Loss on Sale of PP&E:	-	-
(Gain) / Loss on Sale of ST Inv.:	-	-
(+) Goodwill Impairment:	-	-
(+) PP&E Write-Down:	-	-
Changes in Operating Assets & Liabilities:		
Accounts Receivable:	-	-
Prepaid Expenses:	-	-
Inventory:	-	-
Accounts Payable:	-	-
Accrued Expenses:	-	-
Deferred Revenue:	-	-
Cash Flow from Operations:	600	604
Investing Activities:		
(-) Buy Short-Term Investment	-	-
(+) Sell Short-Term Investment	-	-
(-) Buy Long-Term Investments	-	-
(+) Sell Long-Term Investments	-	-
(-) Capital Expenditures:	-	-
(+) PP&E Sale Proceeds:	-	-
Cash Flow from Investing:	-	-
Financing Activities:		
(-) Common Dividends Issued:	-	-
(+) Issue Long-Term Debt:	-	-
(-) Repay Long-Term Debt:	-	-
(+) Issue Short-Term Debt:	-	-
(-) Repay Short-Term Debt:	-	-
(+) Issue Preferred Stock:	-	-
(-) Repay Preferred Stock:	-	-
(-) Repurchase Shares:	-	-
(+) Issue New Shares:	-	-
Cash Flow from Financing:	-	-
FX Rate Effects:	-	-
Beginning Cash:	$ 100	$ 100
Increase / (Decrease) in Cash:	$ 600	$ 604
Cash & Cash Equivalents:	$ 700	$ 704

Balance Sheet

	Beginning of Current Period:	End of Current Period: Before Changes:	End of Current Period: After Changes:
Assets:			
Current Assets:			
Cash & Cash-Equivalents:	$ 100	$ 700	$ 704
Short-Term Investments:	100	100	100
Accounts Receivable:	100	100	100
Prepaid Expenses:	100	100	100
Inventory:	100	100	100
Total Current Assets:	500	1,100	1,104
Long-Term Assets:			
Plants, Property & Equipment:	1,000	1,000	990
Other Intangible Assets:	300	300	300
Long-Term Investments:	100	100	100
Goodwill:	100	100	100
Total Long-Term Assets:	1,500	1,500	1,490
Total Assets:	$ 2,000	$ 2,600	$ 2,594
Liabilities & Equity:			
Current Liabilities:			
Revolver (Short-Term Debt):	$ 100	$ 100	$ 100
Accounts Payable:	200	200	200
Accrued Expenses:	200	200	200
Total Current Liabilities:	500	500	500
Long-Term Liabilities:			
Deferred Revenue:	200	200	200
Deferred Tax Liability:	200	200	200
Long-Term Debt:	100	100	100
Total Long-Term Liabilities:	500	500	500
Total Liabilities:	$ 1,000	$ 1,000	$ 1,000
Equity:			
Shareholders' Equity:			
Common Stock & APIC:	600	600	600
Treasury Stock:	(100)	(100)	(100)
Retained Earnings:	300	900	894
Accum. Other Compr. Income:	100	100	100
Total Shareholders' Equity:	900	1,500	1,494
Preferred Stock:	100	100	100
Total Equity:	$ 1,000	$ 1,600	$ 1,594
Total Liabilities & Equity:	$ 2,000	$ 2,600	$ 2,594
Balance Sheet Balanced?	OK!	OK!	OK!

So in an interview, you could say: *"On the Income Statement, Pre-Tax Income falls by $10, and Net Income falls by $6, assuming a tax rate of 40%.*

On the Cash Flow Statement, Net Income is down by $6, but you add back the $10 in Depreciation, so cash is up by $4 at the bottom. On the Balance Sheet, cash is up by $4, PP&E is down by $10, and so the Assets side is down by $6.

On the other side, Retained Earnings is down by $6 because Net Income was down by $6, so both sides balance."

- **Examples:** Depreciation (PP&E), Amortization (Other Intangible Assets), Stock-Based Compensation (Common Stock & APIC), Gains / (Losses) on PP&E (PP&E), Write-Downs (The Asset you are writing down), and Impairment Charges (The Asset you are impairing).

- **What Changes as a RESULT of These Items Changing:** Pre-Tax Income, Net Income, Cash, Retained Earnings, and Something Else on the Balance Sheet.

- **How the Balance Sheet Balances:** Cash and Retained Earnings change, and something else on the Balance Sheet makes up the difference.

3) Changes to Operational Items on the Balance Sheet

These consist of items like Inventory, Accounts Receivable, Accounts Payable, Accrued Expenses, Prepaid Expenses, and Deferred Revenue.

Non-operational items such as Cash, Investments, and Debt are simpler and are part of category #4 (next).

Just like category #2 above, changes in these items will also affect **something on the Balance Sheet** besides Cash and Retained Earnings.

But these items are trickier because **increases and decreases work differently**.

To figure out what happens, ask yourself a simple question: "Have we *delivered* the product or service to the customer? Or has someone else *delivered* something to us?"

If so, it will appear on the Income Statement. If not, it won't be on the Income Statement.

Consider **Accounts Receivable (AR)**. If AR *increases*, it means we've delivered a product or service and are waiting for the cash. So we record revenue on the Income Statement.

But if AR *decreases*, it means we've collected the cash but haven't delivered anything – so this change won't show up on the IS.

Here's a side-by-side comparison of all 3 statements so you can see how an **AR increase** is different from an **AR decrease**:

IS – INCREASE in Accounts Receivable:

Income Statement	Current Period: Before Changes:	Current Period: After Changes:
Revenue:	$ 1,300	$ 1,400
Cost of Goods Sold (COGS):	100	100
Gross Profit:	1,200	1,300
Operating Expenses:	200	200
Pre-Tax Income:	1,000	1,100
Income Tax Provision:	400	440
Net Income to Common:	$ 600	$ 660

IS – DECREASE in Accounts Receivable:

Income Statement	Current Period: Before Changes:	Current Period: After Changes:
Revenue:	$ 1,300	$ 1,300
Cost of Goods Sold (COGS):	100	100
Gross Profit:	1,200	1,200
Operating Expenses:	200	200
Pre-Tax Income:	1,000	1,000
Income Tax Provision:	400	400
Net Income to Common:	$ 600	$ 600

CFS – INCREASE in Accounts Receivable:

Cash Flow Statement	Current Period: Before Changes:	Current Period: After Changes:
Operating Activities:		
Net Income to Common:	$ 600	$ 660
Changes in Operating Assets & Liabilities:		
Accounts Receivable:	-	(100)
Prepaid Expenses:	-	-
Inventory:	-	-
Accounts Payable:	-	-
Accrued Expenses:	-	-
Deferred Revenue:	-	-
Cash Flow from Operations:	600	560
Beginning Cash:	$ 100	$ 100
Increase / (Decrease) in Cash:	$ 600	$ 560
Cash & Cash Equivalents:	$ 700	$ 660

CFS – DECREASE in Accounts Receivable:

Cash Flow Statement	Current Period: Before Changes:	Current Period: After Changes:
Operating Activities:		
Net Income to Common:	$ 600	$ 600
Changes in Operating Assets & Liabilities:		
Accounts Receivable:	-	100
Prepaid Expenses:	-	-
Inventory:	-	-
Accounts Payable:	-	-
Accrued Expenses:	-	-
Deferred Revenue:	-	-
Cash Flow from Operations:	600	700
Beginning Cash:	$ 100	$ 100
Increase / (Decrease) in Cash:	$ 600	$ 700
Cash & Cash Equivalents:	$ 700	$ 800

BS – INCREASE in Accounts Receivable:

Balance Sheet	Beginning of Current Period:	End of Current Period: Before Changes:	End of Current Period: After Changes:
Assets:			
Current Assets:			
Cash & Cash-Equivalents:	$ 100	$ 700	$ 660
Short-Term Investments:	100	100	100
Accounts Receivable:	100	100	200
Prepaid Expenses:	100	100	100
Inventory:	100	100	100
Total Current Assets:	**500**	**1,100**	**1,160**
Total Assets:	**$ 2,000**	**$ 2,600**	**$ 2,660**
Total Liabilities:	**$ 1,000**	**$ 1,000**	**$ 1,000**
Equity:			
Shareholders' Equity:			
Common Stock & APIC:	600	600	600
Treasury Stock:	(100)	(100)	(100)
Retained Earnings:	300	900	960
Accum. Other Compr. Income:	100	100	100
Total Shareholders' Equity:	**900**	**1,500**	**1,560**
Preferred Stock:	100	100	100
Total Equity:	**$ 1,000**	**$ 1,600**	**$ 1,660**
Total Liabilities & Equity:	**$ 2,000**	**$ 2,600**	**$ 2,660**

BS – DECREASE in Accounts Receivable:

Balance Sheet	Beginning of Current Period:	End of Current Period: Before Changes:	End of Current Period: After Changes:
Assets:			
Current Assets:			
Cash & Cash-Equivalents:	$ 100	$ 700	$ 800
Short-Term Investments:	100	100	100
Accounts Receivable:	100	100	-
Prepaid Expenses:	100	100	100
Inventory:	100	100	100
Total Current Assets:	**500**	**1,100**	**1,100**
Total Assets:	**$ 2,000**	**$ 2,600**	**$ 2,600**
Total Liabilities:	**$ 1,000**	**$ 1,000**	**$ 1,000**
Equity:			
Shareholders' Equity:			
Common Stock & APIC:	600	600	600
Treasury Stock:	(100)	(100)	(100)
Retained Earnings:	300	900	900
Accum. Other Compr. Income:	100	100	100
Total Shareholders' Equity:	**900**	**1,500**	**1,500**
Preferred Stock:	100	100	100
Total Equity:	**$ 1,000**	**$ 1,600**	**$ 1,600**
Total Liabilities & Equity:	**$ 2,000**	**$ 2,600**	**$ 2,600**

So if you're walking through an **increase** in AR, you'd say: *"On the Income Statement, revenue increases by $100, and with no other changes, Pre-Tax Income increases by $100 and Net Income is up by $60 at a 40% tax rate.*

On the Cash Flow Statement, Net Income is up by $60, but the increase in AR reduces cash flow by $100 because you haven't received that revenue in cash. So cash is down by $40 at the bottom.

On the Balance Sheet, cash is down by $40, but AR is up by $100, so the Assets side is up by $60. On the other side, Retained Earnings is up by $60, so the L&E side is up by $60 and both sides balance."

If you're walking through a **decrease** in AR, you'd say: *"On the Income Statement, there are no changes because a decrease in AR corresponds to a cash collection from customers.*

On the Cash Flow Statement, the decrease in AR results in $100 of extra cash flow because the company is collecting cash from customers, so cash is up by $100 at the bottom.

On the Balance Sheet, cash is up by $100 on the Assets side, and AR is down by $100, so the Assets side doesn't change, the L&E side doesn't change, and the BS remains in balance."

We're not going to paste in Excel screenshots for every single possible change; please use the Excel file to try that on your own.

Here's a summary of the most common items:

- **Accounts Receivable**
  - **Increases:** IS, BS, and CFS all change; represents *recorded revenue*.
  - **Decreases:** Only the BS and CFS change; represents *cash collection*.
- **Prepaid Expenses**
  - **Increases:** Only the BS and CFS change; represents *payment for expenses not yet incurred*.
  - **Decreases:** IS, BS, and CFS all change; represents *recognition of an expense previously paid in cash*.
- **Inventory**
  - **Increases:** Only the BS and CFS change; represents *spending on goods that have not yet been sold or delivered.*
  - **Decreases:** IS, BS, and CFS all change; represents *recognition of an expense previously paid in cash*.
- **Accrued Expenses and Accounts Payable**
  - **Increases:** IS, BS, and CFS all change; represents *recognition of an expense that has not yet been paid in cash*.
  - **Decreases:** Only the BS and CFS change; represents *cash payment of an expense that was previously recognized*.
- **Deferred Revenue**
  - **Increases:** Only the BS and CFS change; represents *cash collection for sales that cannot yet be recognized as revenue*.
  - **Decreases:** IS, BS, and CFS all change; represents *recognition of revenue that has already been collected in cash*.

We strongly recommend that you review the 3-statement "interview question" model to understand these questions.

4) Changes to Non-Operational Balance Sheet Items or Cash Flow Statement Items

These items are simple because there are **no immediate Income Statement changes**.

All that happens is that there's a cash inflow or outflow on the Cash Flow Statement, and both Cash and the corresponding Balance Sheet item change.

Here are examples of these changes and the Balance Sheet line items that will change:

- **Capital Expenditures** – PP&E and Cash will change.
- **Purchasing or Selling Securities** – Short/Long-Term Investments and Cash will change.
- **Selling PP&E** – PP&E and Cash will change.
- **Raising or Paying Off Debt** – Debt and Cash will change.
- **Raising or Paying Off Preferred Stock** – Preferred Stock and Cash will change.
- **Issuing Stock** – Common Stock & APIC and Cash will change.
- **Repurchasing Stock** – Treasury Stock and Cash will change.
- **Issuing Dividends** – Retained Earnings and Cash will change.
- **Deferred Taxes** – The Deferred Tax Liability and Cash will change.
- **FX Rate Effects** – Accumulated Other Comprehensive Income (AOCI) and Cash will change.

Sometimes, it's unclear whether or not there's an Income Statement impact.

For example, Preferred Dividends do not impact a company's Net Income, but they *do* impact its "Net Income to Common." Net Income to Common equals Net Income minus Preferred Dividends and appears at the bottom of the Income Statement.

But for the most part, these changes are straightforward.

5) Multi-Step Scenarios and Changes on the Financial Statements

"Multi-step scenarios" in interviews are not complicated as long as you understand each change individually.

With these questions, the interviewer might say something like: *"A company buys a factory using debt, and then starts manufacturing new products. Walk me through how its statements change."*

So it's not just *one* change, such as raising debt, but multiple changes at once.

The 3-statement Excel model will be your best friend here, but let's go through one example:

"You purchase a factory for $100 using $100 of debt. Walk me through the 3 financial statements immediately after this transaction, and then walk me through what happens after a year. Assume that the debt has a 10% interest rate and that $20 in principal is repaid each year. The factories depreciate at $10 per year over 10 years."

Immediately after this change, nothing happens on the Income Statement because Capital Expenditures and Debt Issuances do not appear on the Income Statement.

Instead, you show a cash outflow and cash inflow on the Cash Flow Statement, and they cancel each other out; on the Balance Sheet, PP&E is up by $100 on the Assets side, and Debt is up by $100 on the L&E side, so it remains in balance:

Cash Flow Statement

	Current Period: Before Changes:	Current Period: After Changes:
Operating Activities:		
Net Income to Common:	$ 600	$ 600
Non-Cash Expenses & Other Adjustments:		
(+) Depreciation:	-	-
(+) Stock-Based Compensation	-	-
(+) Amortization of Intangibles	-	-
(+) Deferred Income Taxes:	-	-
(Gain) / Loss on Sale of PP&E:	-	-
(Gain) / Loss on Sale of ST Inv.:	-	-
(+) Goodwill Impairment:	-	-
(+) PP&E Write-Down:	-	-
Changes in Operating Assets & Liabilities:		
Accounts Receivable:	-	-
Prepaid Expenses:	-	-
Inventory:	-	-
Accounts Payable:	-	-
Accrued Expenses:	-	-
Deferred Revenue:	-	-
Cash Flow from Operations:	600	600
Investing Activities:		
(-) Buy Short-Term Investment	-	-
(+) Sell Short-Term Investment	-	-
(-) Buy Long-Term Investments	-	-
(+) Sell Long-Term Investments	-	-
(-) Capital Expenditures:	-	(100)
(+) PP&E Sale Proceeds:	-	-
Cash Flow from Investing:	-	(100)
Financing Activities:		
(-) Common Dividends Issued:	-	-
(+) Issue Long-Term Debt:	-	100
(-) Repay Long-Term Debt:	-	-
(+) Issue Short-Term Debt:	-	-
(-) Repay Short-Term Debt:	-	-
(+) Issue Preferred Stock:	-	-
(-) Repay Preferred Stock:	-	-
(-) Repurchase Shares:	-	-
(+) Issue New Shares:	-	-
Cash Flow from Financing:	-	100
FX Rate Effects:	-	-
Beginning Cash:	$ 100	$ 100
Increase / (Decrease) in Cash:	$ 600	$ 600
Cash & Cash Equivalents:	$ 700	$ 700

Balance Sheet

	Beginning of Current Period:	End of Current Period: Before Changes:	End of Current Period: After Changes:
Assets:			
Current Assets:			
Cash & Cash-Equivalents:	$ 100	$ 700	$ 700
Short-Term Investments:	100	100	100
Accounts Receivable:	100	100	100
Prepaid Expenses:	100	100	100
Inventory:	100	100	100
Total Current Assets:	500	1,100	1,100
Long-Term Assets:			
Plants, Property & Equipment:	1,000	1,000	1,100
Other Intangible Assets:	300	300	300
Long-Term Investments:	100	100	100
Goodwill:	100	100	100
Total Long-Term Assets:	1,500	1,500	1,600
Total Assets:	$ 2,000	$ 2,600	$ 2,700
Liabilities & Equity:			
Current Liabilities:			
Revolver (Short-Term Debt):	$ 100	$ 100	$ 100
Accounts Payable:	200	200	200
Accrued Expenses:	200	200	200
Total Current Liabilities:	500	500	500
Long-Term Liabilities:			
Deferred Revenue:	200	200	200
Deferred Tax Liability:	200	200	200
Long-Term Debt:	100	100	200
Total Long-Term Liabilities:	500	500	600
Total Liabilities:	$ 1,000	$ 1,000	$ 1,100
Equity:			
Shareholders' Equity:			
Common Stock & APIC:	600	600	600
Treasury Stock:	(100)	(100)	(100)
Retained Earnings:	300	900	900
Accum. Other Compr. Income:	100	100	100
Total Shareholders' Equity:	900	1,500	1,500
Preferred Stock:	100	100	100
Total Equity:	$ 1,000	$ 1,600	$ 1,600
Total Liabilities & Equity:	$ 2,000	$ 2,600	$ 2,700
Balance Sheet Balanced?	OK!	OK!	OK!

Income Statement	Current Period: Before Changes:	Current Period: After Changes:
Revenue:	$ 1,300	$ 1,300
Cost of Goods Sold (COGS):	100	100
Gross Profit:	1,200	1,200
Operating Expenses:	200	200
Depreciation:	-	10
Stock-Based Compensation:	-	-
Amortization of Intangibles:	-	-
Operating Income:	1,000	990
(+) Interest Income:	-	-
(-) Interest Expense:	-	(10)
Gain / (Loss) on Sale of PP&E:	-	-
Gain / (Loss) on Sale of ST Inv.:	-	-
(-) Goodwill Impairment:	-	-
(-) PP&E Write-Down:	-	-
Pre-Tax Income:	1,000	980
Income Tax Provision:	400	392
Current Portion of Taxes:	400	392
Deferred Portion of Taxes:	-	-
Net Income:	600	588
(-) Preferred Dividends:	-	-
Net Income to Common:	$ 600	$ 588

For the next part – what happens after a year of owning these factories – you have to factor in the Interest Expense, the Depreciation, and the Debt Principal Repayment.

All of those changes correspond to **THIS** period, but only the **Depreciation** and **Interest Expense** show up on the Income Statement because they're both tax-deductible, whereas the Debt Repayment is not.

On the Income Statement, Pre-Tax Income falls by $20, and so Net Income falls by $12 at a 40% tax rate.

On the Cash Flow Statement, there are a few changes.

Net Income is down by $12, but the Depreciation is non-cash, so we add back the $10 in Depreciation near the top. So far, cash is down by $2.

And then we also record the $20 repayment of long-term debt, which reduces cash flow by $20.

The net effect is that **cash is down by $22**.

On the Balance Sheet, cash is down by $22, and PP&E is down by $10, so the Assets side is down by $32.

On the L&E side, Debt is down by $20 because of the principal repayment, and Retained Earnings is down by $12 because of the reduced Net Income, so both sides are down by $32 and the Balance Sheet balances.

Here's what it looks like:

Cash Flow Statement	Current Period: Before Changes:	Current Period: After Changes:
Operating Activities:		
Net Income to Common:	$ 600	$ 588
Non-Cash Expenses & Other Adjustments:		
(+) Depreciation:	-	10
(+) Stock-Based Compensation	-	-
(+) Amortization of Intangibles	-	-
(+) Deferred Income Taxes:	-	-
(Gain) / Loss on Sale of PP&E:	-	-
(Gain) / Loss on Sale of ST Inv.:	-	-
(+) Goodwill Impairment:	-	-
(+) PP&E Write-Down:	-	-
Changes in Operating Assets & Liabilities:		
Accounts Receivable:	-	-
Prepaid Expenses:	-	-
Inventory:	-	-
Accounts Payable:	-	-
Accrued Expenses:	-	-
Deferred Revenue:	-	-
Cash Flow from Operations:	600	598
Investing Activities:		
(-) Buy Short-Term Investment	-	-
(+) Sell Short-Term Investment	-	-
(-) Buy Long-Term Investments	-	-
(+) Sell Long-Term Investments	-	-
(-) Capital Expenditures:	-	-
(+) PP&E Sale Proceeds:	-	-
Cash Flow from Investing:	-	-
Financing Activities:		
(-) Common Dividends Issued:	-	-
(+) Issue Long-Term Debt:	-	-
(-) Repay Long-Term Debt:	-	(20)
(+) Issue Short-Term Debt:	-	-
(-) Repay Short-Term Debt:	-	-
(+) Issue Preferred Stock:	-	-
(-) Repay Preferred Stock:	-	-
(-) Repurchase Shares:	-	-
(+) Issue New Shares:	-	-
Cash Flow from Financing:	-	(20)
FX Rate Effects:	-	-
Beginning Cash:	$ 100	$ 100
Increase / (Decrease) in Cash:	$ 600	$ 578
Cash & Cash Equivalents:	$ 700	$ 678

Balance Sheet	Beginning of Current Period:	End of Current Period: Before Changes:	End of Current Period: After Changes:
Assets:			
Current Assets:			
Cash & Cash-Equivalents:	$ 100	$ 700	$ 678
Short-Term Investments:	100	100	100
Accounts Receivable:	100	100	100
Prepaid Expenses:	100	100	100
Inventory:	100	100	100
Total Current Assets:	500	1,100	1,078
Long-Term Assets:			
Plants, Property & Equipment:	1,000	1,000	990
Other Intangible Assets:	300	300	300
Long-Term Investments:	100	100	100
Goodwill:	100	100	100
Total Long-Term Assets:	1,500	1,500	1,490
Total Assets:	$ 2,000	$ 2,600	$ 2,568
Liabilities & Equity:			
Current Liabilities:			
Revolver (Short-Term Debt):	$ 100	$ 100	$ 100
Accounts Payable:	200	200	200
Accrued Expenses:	200	200	200
Total Current Liabilities:	500	500	500
Long-Term Liabilities:			
Deferred Revenue:	200	200	200
Deferred Tax Liability:	200	200	200
Long-Term Debt:	100	100	80
Total Long-Term Liabilities:	500	500	480
Total Liabilities:	$ 1,000	$ 1,000	$ 980
Equity:			
Shareholders' Equity:			
Common Stock & APIC:	600	600	600
Treasury Stock:	(100)	(100)	(100)
Retained Earnings:	300	900	888
Accum. Other Compr. Income:	100	100	100
Total Shareholders' Equity:	900	1,500	1,488
Preferred Stock:	100	100	100
Total Equity:	$ 1,000	$ 1,600	$ 1,588
Total Liabilities & Equity:	$ 2,000	$ 2,600	$ 2,568
Balance Sheet Balanced?	OK!	OK!	OK!

At this point, the interviewer might turn to other topics – or he could also throw in a **final twist**.

For example, what if the factory breaks down and the company has to write down its full value and repay the entire debt balance?

He has to specify whether you should walk through this change *over the course of a year* or just before and after the change takes place.

If it's **over the course of an entire year**, it will look like this:

Income Statement	Current Period: Before Changes:	Current Period: After Changes:
Revenue:	$ 1,300	$ 1,300
Cost of Goods Sold (COGS):	100	100
Gross Profit:	1,200	1,200
Operating Expenses:	200	200
Depreciation:	-	10
Stock-Based Compensation:	-	-
Amortization of Intangibles:	-	-
Operating Income:	1,000	990
(+) Interest Income:	-	-
(-) Interest Expense:	-	(10)
Gain / (Loss) on Sale of PP&E:	-	-
Gain / (Loss) on Sale of ST Inv.:	-	-
(-) Goodwill Impairment:	-	-
(-) PP&E Write-Down:	-	(90)
Pre-Tax Income:	1,000	890
Income Tax Provision:	400	356
Net Income:	600	534

Once again, we have to factor in the Depreciation and Interest Expense, which both reduce the company's Pre-Tax Income.

But we also need to include the **PP&E write-down**.

It's a write-down of $90 rather than $100 because we've already depreciated $10 of this PP&E throughout the year.

So if disaster strikes on December 31st, there's only $90 of PP&E *left* to write down at that point.

As a result, Pre-Tax Income falls by $110, and Net Income falls by $66 at a 40% tax rate.

On the Cash Flow Statement, Net Income is down by $66, but we have to make several non-cash adjustments as well.

We still add back the $10 of Depreciation, and we also add back the $90 PP&E write-down **because write-downs are non-cash**.

And then we record the $100 repayment of long-term debt near the bottom. It's $100 because we repay $20 during the year and then we repay the remaining $80 at the very end of the year.

So cash is down by $66, up by $10, up by $90, and down by $100, and is therefore down a total of $66.

On the Balance Sheet, Cash is down by $66 and PP&E is down by $100, so the Assets side is down by $166.

On the L&E side, Debt is down by $100 and Retained Earnings is down by $66, so this side is also down by $166 and both sides balance.

Here's what it looks like on the CFS and BS:

Cash Flow Statement	Current Period: Before Changes:	Current Period: After Changes:
Operating Activities:		
Net Income to Common:	$ 600	$ 534
Non-Cash Expenses & Other Adjustments:		
(+) Depreciation:	-	10
(+) Stock-Based Compensation	-	-
(+) Amortization of Intangibles	-	-
(+) Deferred Income Taxes:	-	-
(Gain) / Loss on Sale of PP&E:	-	-
(Gain) / Loss on Sale of ST Inv.:	-	-
(+) Goodwill Impairment:	-	-
(+) PP&E Write-Down:	-	90
Changes in Operating Assets & Liabilities:		
Accounts Receivable:	-	-
Prepaid Expenses:	-	-
Inventory:	-	-
Accounts Payable:	-	-
Accrued Expenses:	-	-
Deferred Revenue:	-	-
Cash Flow from Operations:	600	634
(-) Buy Long-Term Investments	-	-
(+) Sell Long-Term Investments	-	-
(-) Capital Expenditures:	-	-
(+) PP&E Sale Proceeds:	-	-
Cash Flow from Investing:	-	-
Financing Activities:		
(-) Common Dividends Issued:	-	-
(+) Issue Long-Term Debt:	-	-
(-) Repay Long-Term Debt:	-	(100)
(+) Issue Short-Term Debt:	-	-
(-) Repay Short-Term Debt:	-	-
(+) Issue Preferred Stock:	-	-
(-) Repay Preferred Stock:	-	-
(-) Repurchase Shares:	-	-
(+) Issue New Shares:	-	-
Cash Flow from Financing:	-	(100)
FX Rate Effects:	-	-
Beginning Cash:	$ 100	$ 100
Increase / (Decrease) in Cash:	$ 600	$ 534
Cash & Cash Equivalents:	$ 700	$ 634

Balance Sheet	Beginning of Current Period:	End of Current Period: Before Changes:	End of Current Period: After Changes:
Assets:			
Current Assets:			
Cash & Cash-Equivalents:	$ 100	$ 700	$ 634
Short-Term Investments:	100	100	100
Accounts Receivable:	100	100	100
Prepaid Expenses:	100	100	100
Inventory:	100	100	100
Total Current Assets:	500	1,100	1,034
Long-Term Assets:			
Plants, Property & Equipment:	1,000	1,000	900
Other Intangible Assets:	300	300	300
Long-Term Investments:	100	100	100
Goodwill:	100	100	100
Total Long-Term Assets:	1,500	1,500	1,400
Total Assets:	$ 2,000	$ 2,600	$ 2,434
Liabilities & Equity:			
Accrued Expenses:	200	200	200
Total Current Liabilities:	500	500	500
Long-Term Liabilities:			
Deferred Revenue:	200	200	200
Deferred Tax Liability:	200	200	200
Long-Term Debt:	100	100	-
Total Long-Term Liabilities:	500	500	400
Total Liabilities:	$ 1,000	$ 1,000	$ 900
Equity:			
Shareholders' Equity:			
Common Stock & APIC:	600	600	600
Treasury Stock:	(100)	(100)	(100)
Retained Earnings:	300	900	834
Accum. Other Compr. Income:	100	100	100
Total Shareholders' Equity:	900	1,500	1,434
Preferred Stock:	100	100	100
Total Equity:	$ 1,000	$ 1,600	$ 1,534
Total Liabilities & Equity:	$ 2,000	$ 2,600	$ 2,434
Balance Sheet Balanced?	OK!	OK!	OK!

Return to Top.