Table of Contents – Accounting Questions & Answers

Overview & Key Rules of Thumb

Accounting interview questions never go out of style, and for good reason: they're the quickest way to tell if you understand the **bare minimum** required to work in finance.

There are a few categories of questions to know about when it comes to **Accounting**:

1. **Conceptual Questions** ("What's the difference between Accounts Receivable and Deferred Revenue?")
2. **Single-Step Scenarios** ("What happens on the 3 statements when Depreciation goes up by $10?")
3. **Multi-Step Scenarios** ("Walk me through what happens when you buy inventory using debt, turn it into products, and then sell the products.")
4. **More Advanced Accounting** ("Walk me through what happens when you acquire a 70% stake in another company and pay $70 for it.")

This guide is divided into **Basic** and **Advanced** questions and then several categories within both of those – Conceptual, Single-Step Changes, and Multi-Step Scenarios.

The Advanced section is more focused on Conceptual questions because at that level, interviewers assume that you know how the 3 statements link together.

Before jumping into these questions and answers, you need to understand **key Accounting rules**. You could always get questions that *aren't* covered here – but if you understand the rules, you'll be able to answer them anyway.

Key Rule #1: The Income Statement

The Income Statement lists a company's **revenue**, **expenses**, and **taxes**, with its after-tax profit at the very bottom, over a **period of time** (one quarter, one month, or one year).

To appear on the Income Statement, each item **must** meet the following criteria:

1. It must correspond to the **period shown on the Income Statement only** – if you're paying for an asset that will last for 10-20 years, it would *not* appear on a 1-year Income Statement.
2. It must affect the company's **taxes**. For example, interest paid on debt is tax-deductible so it appears on the Income Statement… but repaying debt principal is **not** tax-deductible, so it does **not** appear on the Income Statement.

To the right, you can see a screenshot demonstrating common items on the Income Statement.

Income Statement	Year 1	Year 2
Revenue:	**$ 1,300**	**$ 1,500**
Cost of Goods Sold (COGS):	100	150
Gross Profit:	**1,200**	**1,350**
Operating Expenses:	200	250
Depreciation:	20	25
Stock-Based Compensation:	10	15
Amortization of Intangibles:	15	20
Operating Income:	**955**	**1,040**
Interest Income:	5	6
(Interest Expense):	(3)	(4)
Gain / (Loss) on Sale of PP&E:	1	-
Other Income / (Expense):	2	3
Pre-Tax Income:	**960**	**1,045**
Income Tax Provision:	384	418
Net Income:	**$ 576**	**$ 627**

The 4 main sections to be aware of:

1. **Revenue and Cost of Goods Sold (COGS):** Revenue is the value of the products/services that a company sells in the period (Year 1 or Year 2), and COGS represents the expenses that are linked **directly** to the sale of those products/services.
2. **Operating Expenses:** Items that are **not directly linked to product sales** – employee salaries, rent, marketing, research and development, as well as non-cash expenses like Depreciation and Amortization.
3. **Other Income and Expenses:** This goes between Operating Income and Pre-Tax Income. Interest shows up here, as well as items such as Gains and Losses when Assets are sold, Impairment Charges, Write-Downs, and anything else that is not part of the company's core business operations.
4. **Taxes and Net Income:** Net Income represents the company's "bottom line" – how much in after-tax profits it has earned. Net Income = Revenue – Expenses – Taxes.

A few points on Income Statement revenue, expenses, and taxes:

1. They do **not** need to be related to a company's operational activities – Gains and Losses on asset sales, Depreciation, and Interest Expense still appear on the IS but are not related to everyday business.
2. They **do not need to be cash expenses** (or cash revenue) – for example, Depreciation and Amortization are both non-cash expenses. Also, companies often record revenue and expenses here *before* they receive or pay them in cash.
3. Sometimes, items may be **embedded in other items** – for example, sometimes Depreciation is included in COGS or Operating Expenses; other times it is a separate item.

Here are more rules of thumb about what appears on the Income Statement:

- **Always Appears:** Revenue, COGS, Operating Expenses, Depreciation, Amortization, Stock-Based Compensation, Interest, Gains / (Losses), Write-Downs, Other Income / (Expenses)
- **Never Appears:** Capital Expenditures, Purchasing or Selling Investments and PP&E (Plants, Property & Equipment), Dividends, Issuing or Repaying Debt Principal, Issuing or Repurchasing Shares, Changes to Balance Sheet Items such as Cash, Debt, Accounts Receivable, Accounts Payable, and so on.

The items on the "Always Appears" list meet the criteria above because:

1. They **do** affect the company's taxes (e.g. paying an employee's salary reduces the company's taxable income); and
2. They correspond to the **period shown** on the Income Statement (e.g. revenue in Year 1 refers to all sales to customers in Year 1… not Year 2).

The items on the "Never Appears" list fail the criteria above because:

1. They do **not** affect the company's taxes (e.g. Dividends or Purchasing Inventory); or
2. Because they do **not** correspond to the period listed on the Income Statement (e.g. Capital Expenditures refers to purchasing Assets that often last for 10-20 or more years).

Key Rule #2: The Balance Sheet

The Balance Sheet shows the company's **resources** – its Assets – and how it **acquired** those resources – its Liabilities & Equity – at a **specific point in time**.

Think about what a personal Balance Sheet might look like: maybe you've invested $50K in the stock market, you have $30K in cash in your bank account, and you own a house that's worth $500K.

Those are your **Assets** because they can all be sold for cash, and they may even increase in value over time, which would result in more money for you.

How did you get that cash, your house, and your investments?

Part of it's from your **saved up, after-tax earnings from your job** – you've saved $200K, cumulatively, after taxes, over the years.

And then part of it is also from **debt** in the form of the mortgage on your house, which is worth $380K.

- **Your Assets** = $50K in Investments + $30K in Cash + $500K House = $580K
- **Your Liabilities** = $380K Mortgage
- **Your Equity** = $200K in After-Tax, Saved Up Job Earnings

Your **Assets** are worth $580K, and so are your **Liabilities + Equity** – that's no coincidence, because both your *personal* Balance Sheet and companies' Balance Sheets **must always remain in balance**.

In other words, if you have $580K in "resources," you must have gotten that $580K from somewhere. Assets don't just appear out of thin air.

Here are the key Balance Sheet rules:

1. **Assets** must **always** equal **Liabilities + Equity** – no exceptions.
2. An **Asset** is an item that will result in, directly or indirectly, **additional cash in the future**.
3. A **Liability** is an item that will result in, directly or indirectly, **less cash in the future**. Most Liabilities are related to **external parties** – payments owed to suppliers, or borrowed money, for example. Liabilities are used to **fund** a business.
4. **Equity** line items are similar to Liabilities (used to fund a business), but they refer to the company's own **internal operations** rather than external parties.

Balance Sheet		
	Year 1	Year 2
Assets:		
Current Assets:		
Cash & Cash-Equivalents:	$ 722	$ 1,391
Short-Term Investments:	99	95
Accounts Receivable:	95	97
Prepaid Expenses:	102	99
Inventory:	103	101
Total Current Assets:	**1,121**	**1,783**
Long-Term Assets:		
Plants, Property & Equipment (PP&E):	986	974
Other Intangible Assets:	185	165
Long-Term Investments:	103	106
Goodwill:	100	100
Total Long-Term Assets:	**1,374**	**1,345**
Total Assets:	**$ 2,495**	**$ 3,128**
Liabilities & Equity:		
Current Liabilities:		
Revolver (Short-Term Debt):	$ 101	$ 102
Accounts Payable:	204	199
Accrued Expenses:	201	198
Total Current Liabilities:	**506**	**499**
Long-Term Liabilities:		
Deferred Revenue:	209	214
Deferred Tax Liability:	200	200
Long-Term Debt:	103	106
Total Long-Term Liabilities:	**512**	**520**
Total Liabilities:	**$ 1,018**	**$ 1,019**
Shareholders' Equity:		
Common Stock & APIC:	616	637
Treasury Stock:	(105)	(110)
Retained Earnings:	866	1,482
Accumulated Other Compr. Income:	100	100
Total Shareholders' Equity:	**1,477**	**2,109**
Total Liabilities & Equity:	**$ 2,495**	**$ 3,128**

To the right, you'll see a screenshot of what a company's Balance Sheet might look like, with the most common items shown.

You can see that it's split into **Current Assets** (anything that lasts for under 1 year) and **Long-Term Assets** (anything that lasts for more than 1 year) and similar categories for Liabilities.

Definitions of key Assets:

- **Cash:** Just like cash in your bank account.
- **Short-Term Investments:** Less liquid than cash – Certificates of Deposit (CDs) and money-market accounts and such.
- **Accounts Receivable:** The company has recorded this as revenue on its Income Statement but *hasn't* received it in cash yet. It's like an "IOU" from a customer. And it will turn into cash when the customer pays.
- **Prepaid Expense:** The company has paid these expenses *in cash* but hasn't recorded them as expenses on the Income Statement yet.
- **Inventory:** What they need to manufacture and sell products – for a company like Apple, all the parts that go into iPhones and iPads.
- **PP&E:** Factories, buildings, land, equipment, and anything else that will last for over a year and contribute to the company's core business.
- **Other Intangible Assets:** Patents, trademarks, intellectual property… usually the result of acquisitions. Similar to Goodwill, but this balance *amortizes* (decreases) over time as these items "expire."
- **Long-Term Investments:** Less liquid and longer-lasting investments than Cash or Short-Term Investments.
- **Goodwill:** The premium that the company has paid *over* other companies' Shareholders' Equity when acquiring them.

Now, the definitions of key Liabilities:

- **Revolver:** Similar to a "credit card" for a company; it borrows money as needed and must repay it quickly.
- **Accounts Payable:** The company has *recorded* these as expenses on the Income Statement, but *hasn't* yet paid them out in cash yet – used for one-time items with specific invoices, such as payment for legal services.
- **Accrued Expenses:** The company has *recorded* these as expenses on the Income Statement, but *hasn't* yet paid them out in cash yet – used for recurring monthly items without invoices, such as employee wages, utilities, and rent.

- **Deferred Revenue:** The company has collected cash *in advance* from customers for products/services yet to be delivered, and it will recognize this as real revenue over time.
- **Deferred Tax Liability:** The company has paid lower taxes than what it really owes, and needs to make it up by paying additional taxes to the government in the future.
- **Long-Term Debt:** Similar to a mortgage or a car loan: debt that is due and must be repaid in over a year's time.

And finally, Equity line items:

- **Common Stock & Additional Paid-In Capital (APIC):** This represents the **market value of shares *at the time those shares were issued by the company***. When a company goes public, the total dollar value of shares issued shows up here. This does *not* change even if the share price changes afterward.
- **Treasury Stock:** This represents the cumulative value of **shares the company has repurchased** from investors. This does *not* change even if the share price changes afterward.
- **Retained Earnings:** This represents the company's saved up, after-tax profits (minus any dividends it has issued). This is like the $200K *you* saved up, after-taxes, in our "personal Balance Sheet" example above.
- **Accumulated Other Comprehensive Income (AOCI):** This is a section for "miscellaneous saved-up income" – you see items like the effect of foreign currency exchange rate changes here, as well as unrealized gains and losses on certain types of securities (i.e. if their values go up or down but the company has not yet sold them).

Key Rule #3: The Cash Flow Statement

Similar to the Income Statement, the **Cash Flow Statement** tracks changes over a period of time (one month, one quarter, or one year). It exists for 2 reasons:

1. You may have shown **non-cash revenue or expenses** on the Income Statement. These need to be adjusted on the Cash Flow Statement to determine how your cash balance actually changes.
2. There may be **additional *cash* inflows and outflows that have *not* appeared** on the Income Statement. For example, Capital Expenditures and Dividends are both real cash expenses. You need to factor these in to figure out how your cash balance really changes by.

Cash Flow Statement	Year 1	Year 2
Operating Activities:		
Net Income:	$ 576	$ 627
Non-Cash Expenses & Other Adjustments:		
Depreciation:	20	25
Stock-Based Compensation:	10	15
Amortization of Intangibles:	15	20
(Gain) / Loss on Sale of PP&E:	(1)	-
Changes in Operating Assets & Liabilities:		
Accounts Receivable:	5	(2)
Prepaid Expenses:	(2)	3
Inventory:	(3)	2
Accounts Payable:	4	(5)
Accrued Expenses:	1	(3)
Deferred Revenue:	9	5
Cash Flow from Operations:	**634**	**687**
Investing Activities:		
Purchase Short-Term Investments:	(2)	(1)
Sell Short-Term Investments:	3	5
Purchase Long-Term Investments:	(4)	(5)
Sell Long-Term Investments:	1	2
Capital Expenditures:	(10)	(15)
PP&E Sale Proceeds:	5	2
Cash Flow from Investing:	**(7)**	**(12)**
Financing Activities:		
Dividends Issued:	(10)	(11)
Issue Long-Term Debt:	4	5
Repay Long-Term Debt:	(1)	(2)
Issue Short-Term Debt:	2	3
Repay Short-Term Debt:	(1)	(2)
Repurchase Shares:	(5)	(5)
Issue New Shares:	6	6
Cash Flow from Financing:	**(5)**	**(6)**
Beginning Cash:	$ 100	$ 722
Increase / Decrease in Cash:	$ 622	$ 669
Cash & Cash Equivalents:	$ 722	$ 1,391

The Cash Flow Statement is separated into 3 main sections (see diagram on the left).

1. **Cash Flow from Operations (CFO)** – Net Income from the Income Statement flows in at the top. Then, you adjust for non-cash expenses, and take into account how *operational* Balance Sheet items such as Accounts Receivable and Accounts Payable have changed.
2. **Cash Flow from Investing (CFI)** – Anything related to the company's **investments**, **acquisitions**, and **PP&E** shows up here. Purchases are negative because they *use up* cash, and sales are positive because they result in *more cash*.
3. **Cash Flow from Financing (CFF)** – Items related to **debt**, **dividends**, and **issuing or repurchasing shares** show up here.

Some accounting textbooks (and some interview guides…) claim that CFO is for Current Assets and Current Liabilities, CFI is for Long-Term Assets, and CFF is for Long-Term Liabilities and Equity.

That definition isn't completely *wrong*, but it's not 100% accurate because there are many exceptions:

- **Deferred Revenue** is often a Long-Term Liability, but never shows up in Cash Flow from Financing – because it's related to customers paying the company for products/services.
- **Short-Term Investments** is a Current Asset, but it appears in Cash Flow from Investing, not Cash Flow from Operations – since it's an investment and has nothing to do with accepting customer payments or paying for employees or other expenses.
- The **Revolver** is a Current Liability, but it appears in Cash Flow from Financing, not Cash Flow from Operations – because it's related to how the company is *financing* its operations, not its actual operations.

So you need to be careful when using this commonly cited "rule" – it's better to associate each section of the Cash Flow Statement with *types* of items rather than strict categories from the Balance Sheet.

If an item was already recorded on the Income Statement and it is a true cash revenue or expense, it will *not* appear on the Cash Flow Statement… with one exception.

Sometimes, you use the Cash Flow Statement to "re-classify" income or expenses.

The most common example is **Gains or Losses on Asset Sales** – those *are* most certainly cash income or expenses … so why do you list them in Cash Flow from Operations?

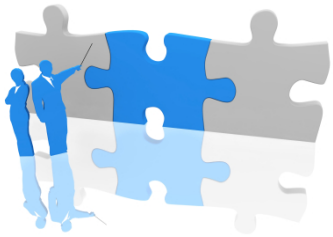
Because you're re-classifying that cash flow – you're subtracting it *out* of Cash Flow from Operations and instead including it as part of the full selling price of the assets in Cash Flow from Investing instead.

This is an **advanced** point and it is unlikely to come up in interviews, but we're pointing it out because you see it with a few other, more advanced accounting concepts as well.

Key Rule #4: How to Link the 3 Statements

In real life, this process gets complicated because of many exceptions and unusual items on the statements.

Luckily for you, interviews are **not** real life and those scenarios are unlikely to come up – so we can create a step-by-step process for linking the statements:



1. **First**, Net Income from the bottom of the Income Statement becomes the top line of the Cash Flow Statement.
2. **Second**, you add back non-cash expenses from the Income Statement (and flip the signs of items such as Gains and Losses).
3. **Third**, you reflect changes in *operational* Balance Sheet line items – if an Asset goes **up**, cash flow goes **down** and vice versa; if a Liability goes **up**, cash flow goes **up** and vice versa.
4. **Fourth**, you reflect Purchases and Sales of Investments and PP&E in Cash Flow from Investing.
5. **Fifth**, you reflect Dividends, Debt issued or repurchased, and Shares issued or repurchased in Cash Flow from Financing.
6. **Sixth**, you calculate the net change in cash at the bottom of the CFS, and then link this into cash at the top of the *next* period's Balance Sheet.
7. **Seventh**, you update the Balance Sheet to reflect changes in Cash, Debt, Equity, Investments, PP&E, and anything else that came from the Cash Flow Statement.

A few more rules to keep in mind as you link the statements:

1. Reflect each Balance Sheet item **once and only once** on the Cash Flow Statement, and vice versa.

2. If an Asset goes **up**, cash flow goes **down**; if a Liability goes **up**, cash flow goes **up**, and vice versa.
3. The Balance Sheet **must** always balance (Assets must always equal Liabilities + Equity), no matter what else happens.

Those 3 rules above are universal and there are no exceptions. If you remember them and what goes in each section of the Cash Flow Statement, you'll be in better shape than 99% of interviewees.

Key Rule #5: Changes on the Statements

At this stage, you are much better off looking at the free **3-statement model** we provide (see the next section) so you can see how everything changes visually.

To provide more structure, though, you can put most changes into **4 different categories:**

1) **Changes to True Cash Item on the Income Statement**

These are all straightforward – Pre-Tax Income and Net Income change, and so do Cash and Retained Earnings.

- **Examples:** Revenue, COGS, Operating Expenses, Interest Income / (Expense)
- **What Changes as a RESULT of These Items Changing:** Pre-Tax Income, Net Income, Cash, Retained Earnings
- **How the Balance Sheet Balances:** Cash and Retained Earnings both change

2) **Changes to Non-Cash or Re-Classified Item on Income Statement**

These are relatively straightforward because they follow a set pattern: Pre-Tax Income and Net Income change, but you need to **add back or subtract the charge on the Cash Flow Statement**.

So Cash and Retained Earnings change, but **something else on the Balance Sheet will also change**.

The tricky part is what that "something else" is, but most of the time it is intuitive. The corresponding Balance Sheet items that change are shown in parentheses below:

- **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 that you are writing down), Impairment Charges (The Asset that you are impairing)
- **What Changes as a RESULT of These Items Changing:** Pre-Tax Income, Net Income, Cash, Retained Earnings, Something Else on Balance Sheet
- **How the Balance Sheet Balances:** Cash and Retained Earnings both change, and something else on the Balance Sheet makes up the difference

3) Changes to Operational Balance Sheet Item

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

Non-operational items such as Cash, Investments, and Debt are not counted because they are **simpler** to think through and are part of category #4 below.

You need to understand the 2 following points with these questions:

1. Whether or not changes to these items will impact the **Income Statement**.
2. How an item **increasing** vs. that same item **decreasing** are different.

There is no good "rule" you can apply for all of these items, but if you take a look at the 3-statement model we've included, a lot of this will become intuitive.

Let's go through the most common items in interviews:

Accounts Receivable

What It Means Going UP: If AR goes up, it means that you have **recorded revenue but *not* collected it in cash from customers yet**. You've delivered the product/service, but they haven't paid you in cash yet… but you record it as revenue anyway.

Output - Here's What Happens on the Statements...		
Cash Changes By...	$	(40)
Shareholders' Equity Changes By...	$	60
Net Income Changes By....	$	60
Assets Side Changes By...	$	60
Liabilities & Equity Side Changes By...	$	60
Balance Sheet Still Balanced?		OK!

Changes on the Statements: Revenue, Pre-Tax Income, and Net Income change; Cash, Accounts Receivable, and Shareholders' Equity (Retained Earnings) all change. See the diagram on the left for an AR increase of $100.

What It Means Going DOWN: If AR goes down, that means you've **collected the cash** from customers that owe you. So nothing on the IS changes – it's only a cash collection, and your cash goes up.

Changes on the Statements: Cash (up) and Accounts Receivable (down).

Prepaid Expenses

What It Means Going UP: When Prepaid Expenses goes up, you **pay in advance, in cash,** for a future product or service but you do **not** record the expense on the Income Statement yet because it hasn't been delivered yet. For example, prepaid insurance plans often fall under this category.

Changes on the Statements: Cash (down) and Prepaid Expenses (up).

What It Means Going DOWN: When Prepaid Expense goes down, you now **record on the Income Statement the expense that you previously paid in cash**. So the IS changes, and so do a number of BS items.

Changes on the Statements: Pre-Tax Income, Net Income, Cash, Shareholders'

Output - Here's What Happens on the Statements...		
Cash Changes By...	$	40
Shareholders' Equity Changes By...	$	(60)
Net Income Changes By....	$	(60)
Assets Side Changes By...	$	(60)
Liabilities & Equity Side Changes By...	$	(60)
Balance Sheet Still Balanced?		OK!

Equity (Retained Earnings), Prepaid Expenses. See the diagram for an example of a $100 decrease in Prepaid Expenses.

Inventory

What It Means Going UP: When Inventory goes up, that means that you've purchased products but **have not manufactured or sold anything yet**. Therefore, nothing on the IS changes and only Inventory and Cash on the BS change.

Changes on the Statements: Cash (down) and Inventory (up).

What It Means Going DOWN: When Inventory goes down, that means that you've now turned it into finished products and sold it to customers… so expenses on the IS increase to reflect the cost of these goods, and you (usually) have additional revenue as well from having sold them.

Output - Here's What Happens on the Statements...		
Cash Changes By...	$	40
Shareholders' Equity Changes By...	$	(60)
Net Income Changes By....	$	(60)
Assets Side Changes By...	$	(60)
Liabilities & Equity Side Changes By...	$	(60)
Balance Sheet Still Balanced?		OK!

Changes on the Statements: Revenue (Ask to confirm this), Additional COGS on the IS, Pre-Tax Income, Net Income, Cash, Shareholders' Equity (Retained Earnings), Inventory. See the diagram for a $100 decrease in Inventory (representing a $100 increase in COGS – no additional revenue here).

Accrued Expenses

What It Means Going UP: When Accrued Expenses goes up, it means that we've recorded an expense on the Income Statement but *haven't* paid it out in cash yet.

For example, we pay an employee in cash at the end of each month but record it as an expense over each week of the month before paying it out at the end. The expense would be recorded on the weekly Income Statements and Accrued Expenses would increase until the payout at the end of the month.

It's the opposite of Prepaid Expenses.

Output - Here's What Happens on the Statements...		
Cash Changes By...	$	40
Shareholders' Equity Changes By...	$	(60)
Net Income Changes By....	$	(60)
Assets Side Changes By...	$	40
Liabilities & Equity Side Changes By...	$	40
Balance Sheet Still Balanced?		OK!

Changes on the Statements: Pre-Tax Income, Net Income, Cash, Shareholders' Equity (Retained Earnings), Accrued Expenses. See the diagram for what happens after a $100 increase in Accrued Expenses.

What It Means Going DOWN: When Accrued Expenses goes down, it means we've now paid out in cash an expense that was previously recorded on the IS… so nothing on the Income Statement changes.

Changes on the Statements: Cash (down) and Accrued Expenses (down).

Accounts Payable

What It Means Going UP: The same as Accrued Expenses: we've received a product/service, recorded it as an expense on the IS, but haven't paid for it in cash yet.

Changes on the Statements: Pre-Tax Income, Net Income, Cash, Shareholders' Equity (Retained Earnings), Accounts Payable.

What It Means Going DOWN: The same as Accrued Expenses: when it decreases, that signifies a cash payout of an expense that was previously recorded on the IS.

Changes on the Statements: Cash and Accounts Payable.

Deferred Revenue

What It Means Going UP: When Deferred Revenue goes up, it means that we've collected cash from customers for a product/service, but *haven't* recorded it as revenue yet – so there are no changes on the Income Statement.

Changes on the Statements: Cash (up) and Deferred Revenue (up).

What It Means Going DOWN: When Deferred Revenue goes down, it means that now we're **recognizing** this previously collected cash in the form of revenue, so the Income Statement changes.

Changes on the Statements: Revenue, Pre-Tax Income, Net Income, Cash, Shareholders' Equity (Retained Earnings), Deferred Revenue. See the diagram for a $100 decrease in Deferred Revenue.

Output - Here's What Happens on the Statements...		
Cash Changes By...	$	(40)
Shareholders' Equity Changes By...	$	60
Net Income Changes By....	$	60
Assets Side Changes By...	$	(40)
Liabilities & Equity Side Changes By...	$	(40)
Balance Sheet Still Balanced?		OK!

4) **Non-Operational Balance Sheet Item or Cash Flow Statement Item Changes**

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

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

Below, we list a few common examples with the corresponding Balance Sheet item that changes in parentheses:

- **Examples:** Purchasing or Selling Securities (Short-Term or Long-Term Investments), Capital Expenditures (PP&E), Selling PP&E (PP&E), Raising Debt (Debt), Paying Off Debt (Debt), Issuing Stock (Common Stock & APIC), Repurchasing Stock (Common Stock & APIC), Issuing Dividends (Retained Earnings)
- **What Changes as a RESULT of These Items Changing:** Cash and the corresponding Balance Sheet item.
- **How the Balance Sheet Balances:** Cash and the corresponding Balance Sheet item both change.

Most of these changes are very straightforward – if you have any doubts at all, please see the **3-statement model** we include and you'll understand how everything works.

For Further Learning

The rules above are a great start, but sometimes you need more: if you're in this position, click here to check out our Financial Modeling Fundamentals course.

You receive a $50 discount as a *Breaking Into Wall Street* member, and you get 20 hours of video tutorials along with several **bonus case studies** on real M&A deals and leveraged buyouts.

It has been one of our most popular courses year after year, and it's a great way to extend your knowledge of accounting and prepare even more for interviews.

Accounting Interview Question 3-Statement Model

To help you understand everything above in more depth and see firsthand how the financial statements work, we've included a **3-statement model** designed specifically to help you answer interview questions.

You'll need to be logged into the *Breaking Into Wall Street* site to access it – once you're logged in, click the link below to access the model and the tutorial video:

- Accounting 3-Statement Model and Video Tutorial

I strongly recommend going through this model, seeing what makes it tick, and entering different values to see how all the statements are impacted by various changes. We even use **conditional formatting** so that you can see exactly how all the line items on the statements change.

This model is **more complicated** than what you will see in interviews, but that's the point: would you rather be *over-prepared* or under-prepared?

Accounting Interactive Quiz

We also include **an interactive quiz on accounting questions** that will let you test your knowledge of everything – even if you don't have a banker friend who can quiz you 24/7.

The format is the same as all the other quizzes that are included in this guide: multiple choice and true / false questions on the major accounting topics you need to know, divided into basic and advanced questions (technically there are two quizzes, for each level).

If you score above 90% on both quizzes, you know more about accounting than most investment bankers (I'm not joking – many bankers have **poor** knowledge of accounting) and you'll be well-prepared to dominate your interviews.

Once you've logged into the *Breaking Into Wall Street* site, click the links below to take the quizzes:

- Basic Accounting Quiz
- Advanced Accounting Quiz

Accounting Questions & Answers – Basic

Please see everything above in the "Key Rules" section if you haven't already been through that.

As you go through these questions, make sure you pull up the **3-statement model** included via the link above because that will make it far easier to understand everything.

Basic Concepts

1. Walk me through the 3 financial statements.

The 3 major financial statements are the Income Statement, Balance Sheet and Cash Flow Statement.

The Income Statement shows the company's revenue and expenses over a period of time, and goes down to Net Income, the final line on the statement.

The Balance Sheet shows the company's Assets – its resources – such as Cash, Inventory and PP&E, as well as its Liabilities – such as Debt and Accounts Payable – and Shareholders' Equity – at a specific point in time. Assets must equal Liabilities plus Shareholders' Equity.

The Cash Flow Statement begins with Net Income, adjusts for non-cash expenses and changes in operating assets and liabilities (working capital), and then shows how the company has spent cash or received cash from Investing or Financing activities; at the end, you see the company's net change in cash.

2. Can you give examples of major line items on each of the financial statements?

Income Statement: Revenue; Cost of Goods Sold; SG&A (Selling, General & Administrative) Expenses; Operating Income; Pre-Tax Income; Net Income.

Balance Sheet: Cash; Accounts Receivable; Inventory; Plants, Property & Equipment (PP&E); Accounts Payable; Accrued Expenses; Debt; Shareholders' Equity.

Cash Flow Statement: Cash Flow from Operations (Net Income; Depreciation & Amortization; Stock-Based Compensation; Changes in Operating Assets & Liabilities); Cash Flow from Investing (Capital Expenditures, Sale of PP&E, Sale/Purchase of Investments); Cash Flow from Financing (Dividends Issued, Debt Raised / Paid Off, Shares Issued / Repurchased)

3. How do the 3 statements link together?

To tie the statements together, Net Income from the Income Statement becomes the top line of the Cash Flow Statement.

Then, you add back any non-cash charges such as Depreciation & Amortization to this Net Income number.

Next, changes to *operational* Balance Sheet items appear and either reduce or increase cash flow depending on whether they are Assets or Liabilities and whether they go up or down. That gets you to Cash Flow from Operations.

Now you take into account investing and financing activities and changes to items like PP&E and Debt on the Balance Sheet; those will increase or decrease cash flow, and at the bottom you get the net change in cash.

On the Balance Sheet for the *end* of this period, Cash at the top equals the beginning Cash number (from the start of this period), plus the net change in cash from the Cash Flow Statement.

On the other side, Net Income flows into Shareholders' Equity to make the Balance Sheet balance.

At the end, Assets must always equal Liabilities plus Equity.

4. If I were stranded on a desert island and only had one financial statement and I wanted to review the overall health of a company, which statement would I use and why?

You would use the Cash Flow Statement because it gives a true picture of how much cash the company is actually generating – the Income Statement is misleading because it *includes* non-cash expenses and *excludes* actual cash expenses such as Capital Expenditures.

And that's the #1 thing you care about when analyzing the financial health of any business – its true cash flow.

5. Let's say I could only look at 2 statements to assess a company's prospects – which 2 would I use and why?

You would pick the Income Statement and Balance Sheet because you can create the Cash Flow Statement from both of those (assuming that you have "Beginning" and "Ending" Balance Sheets that correspond to the same period the Income Statement is tracking).

6. Let's say I have a new, unknown item that belongs on the Balance Sheet. How can I tell whether it should be an Asset or a Liability?

An **Asset** will result in **additional cash or potential cash** in the future – think about how Investments or Accounts Receivable will result in a direct cash increase, and how Goodwill or PP&E may result in an *indirect* cash increase in the future.

A **Liability** will result in **less cash or potential cash** in the future – think about how Debt or Accounts Payable will result in a direct cash decrease, and how something like Deferred Revenue will result in an *indirect* cash decrease as you recognize additional taxes in the future from recognizing revenue.

Ask what direction cash will move in as a result of this new item and that tells you whether it's an Asset or Liability.

7. How can you tell whether or not an expense should appear on the Income Statement?

Two conditions MUST be true for an expense to appear on the IS:

1. It must correspond to something in the **current period**.
2. It must be **tax-deductible**.

Employee compensation and marketing spending, for example, satisfy both conditions.

Depreciation and Interest Expense also meet both conditions – Depreciation only represents the "loss in value" of PP&E (or to be more technically precise, the allocation of the investment in PP&E) in the **current period** you're in.

Repaying debt principal does *not* satisfy both of these conditions because it is not tax-deductible.

Advanced Note: Technically, "tax-deductible" here means "deductible for **book** tax purposes" (i.e. only the tax number that appears on the company's Income Statement) – see the Advanced Accounting section for more on this topic.

8. Let's say that you have a non-cash expense (Depreciation or Amortization, for example) on the Income Statement. Why do you add back the entire expense on the Cash Flow Statement?

Because you want to reflect that you've **saved on taxes** with the non-cash expense.

Let's say you have a non-cash expense of $10 and a tax rate of 40%. Your Net Income decreases by $6 as a result… but then you add back the entire non-cash expense of $10 on the CFS so that your cash goes up by $4.

That increase of $4 reflects the **tax savings** from the non-cash expense. If you just added back the after-tax expense of $6 you'd be saying, "This non-cash expense has no impact on our taxes or cash balance."

9. How do you decide when to capitalize rather than expense a purchase?

If the purchase corresponds to an Asset with a useful life of over 1 year, it is **capitalized** (put on the Balance Sheet rather than shown as an expense on the Income Statement). Then it is Depreciated (tangible assets) or Amortized (intangible assets) over a certain number of years.

Purchases like factories, equipment and land all last longer than a year and therefore show up on the Balance Sheet. Employee salaries and the cost of manufacturing products (COGS) only "last" for the current period and therefore show up on the Income Statement as normal expenses instead.

Note that even if you're paying for something like a multi-year lease for a building, you **would not capitalize it unless you own the building and pay for the entire building in advance**.

10. If Depreciation is a non-cash expense, why does it affect the cash balance?

Although Depreciation is a non-cash expense, it is **tax-deductible**. Therefore, an increase in Depreciation will reduce the amount of taxes you pay, which boosts your cash balance. The opposite happens if Depreciation decreases.

11. Where does Depreciation usually appear on the Income Statement?

It could be in a separate line item, or it could be embedded in Cost of Goods Sold or Operating Expenses – each company does it differently. Note that the end result for accounting questions is the same: Depreciation always reduces Pre-Tax Income.

12. Why is the Income Statement not affected by Inventory purchases?

The expense of purchasing Inventory is **only** recorded on the Income Statement when the goods associated with it have been manufactured and sold – so if it's just sitting in a warehouse, it does not count as Cost of Goods Sold (COGS) until the company manufactures it into a product and sells it.

13. Debt repayment shows up in Cash Flow from Financing on the Cash Flow Statement. Why don't interest payments also show up there? They're a financing activity!

The difference is that interest payments correspond to the **current period** and are **tax-deductible**, so they have already appeared on the Income Statement. Since they are a true cash expense and already appeared on the IS, showing them on the CFS would be double-counting them and would be incorrect.

Debt repayments are a true cash expense but they do **not** appear on the IS, so we **need** to adjust for them on the CFS.

If something is a true cash expense and it has already appeared on the IS, it will **never** appear on the CFS unless we are re-classifying it – because you have already factored in its cash impact.

14. What's the difference between Accounts Payable and Accrued Expenses?

Mechanically, they are the same: they're Liabilities on the Balance Sheet used when you've recorded an Income Statement expense for a product/service you have received, but have not yet paid for in cash. They both affect the statements in the same way as well (see the model).

The difference is that Accounts Payable is mostly for one-time expenses with invoices, such as paying for a law firm, whereas Accrued Expenses is for recurring expenses without invoices, such as employee wages, rent, and utilities.

15. When would a company collect cash from a customer and *not* record it as revenue?

Typically this happens when the customer **pays upfront**, in cash, for months or years of a product/service, but the company *hasn't* delivered it yet. Cases where you see this:

1. Web-based subscription software.
2. Cell phone carriers that sell annual contracts.
3. Magazine publishers that sell subscriptions.

You only **record** revenue when you actually **deliver** the products / services – so the company does not record cash collected as revenue right away.

16. If cash collected is not recorded as revenue, what happens to it?

It goes into the Deferred Revenue balance on the Balance Sheet under Liabilities.

Over time, as the services or products are delivered, the Deferred Revenue balance turns into real revenue on the Income Statement and the Deferred Revenue balance decreases.

17. Wait a minute… Deferred Revenue reflects cash that we've already collected upfront for a product/service we haven't delivered yet. Why is it a Liability? That's great for us!

Remember the definitions of Assets and Liabilities: an Asset results in **more** future cash, and a Liability results in **less** future cash.

Think about how Deferred Revenue works: not only is the burden on **us** to deliver the product/service in question, but **we are also going to pay additional taxes and possibly recognize additional future expenses** when we record it as real revenue.

It's counter-intuitive, but that is why Deferred Revenue is a liability: it **implies** additional future expenses.

18. Wait, so what's the difference between Accounts Receivable and Deferred Revenue? They sound similar.

There are 2 main differences:

1. Accounts Receivable has **not** yet been collected in cash from customers, whereas Deferred Revenue has been.
2. Accounts Receivable is for a product/service the company has *already* delivered but hasn't been paid for yet, whereas Deferred Revenue is for a product/service the company has *not* yet delivered.

Accounts Receivable is an Asset because it implies additional future cash whereas Deferred Revenue is a Liability because it implies the opposite.

19. How long does it usually take for a company to collect its Accounts Receivable balance?

Generally the **Accounts Receivable Days** are in the 30-60 day range, though it can be higher for companies selling higher-priced items and it might be lower for companies selling lower-priced items with cash payments only.

20. How are Prepaid Expenses (PE) and Accounts Payable (AP) different?

It's similar to the difference between Accounts Receivable and Deferred Revenue above:

1. Prepaid Expenses have *already* been paid out in cash, but haven't yet shown up on the Income Statement, whereas Accounts Payable *haven't* been paid out in cash but have shown up on the IS.
2. PE is for product/services that have not yet been delivered to the company, whereas AP is for products/services that have already been delivered.

21. You're reviewing a company's Balance Sheet and you see an "Income Taxes Payable" line item on the Liabilities side. What is this?

Income Taxes Payable refers to normal income taxes that accrue and are then paid out in cash, similar to Accrued Expenses… but for taxes instead.

Example: A company pays corporate income taxes in cash once every 3 months. But they also have monthly Income Statements where they record income taxes, even if they haven't been paid out in cash yet.

Those taxes increase the Income Taxes Payable account until they are paid out in cash, at which point Income Taxes Payable decreases.

22. You see a "Noncontrolling Interest" (AKA Minority Interest) line item on the Liabilities side of a company's Balance Sheet. What does this mean?

If you own over 50% but less than 100% of another company, this refers to the portion you **do not own**.

Example: Another company is worth $100. You own 70% of it. Therefore, there will be a Noncontrolling Interest of $30 on your Balance Sheet to represent the 30% you do not own.

NOTE: There are more questions on this topic in the Advanced section. At a basic level, you should just understand what it means.

23. You see an "Investments in Equity Interests" (AKA Associate Companies) line item on the Assets side of a firm's Balance Sheet. What does this mean?

If you own over 20% but less than 50% of another company, this refers to the portion that **you DO own.**

Example: Another company is worth $100. You own 25% of it. Therefore, there will be an "Investments in Equity Interests" line item of $25 on your Balance Sheet to represent the 25% that you own.

NOTE: There are more questions on this topic in the Advanced section. At a basic level, you should just understand what it means.

24. Could you ever have negative Shareholders' Equity? What does it mean?

Yes. It is common in 2 scenarios:

1. Leveraged Buyouts with dividend recapitalizations – it means that the owner of the company has taken out a large portion of its equity (usually in the form of cash), which can sometimes turn the number negative.
2. It can also happen if the company has been losing money consistently and therefore has a declining Retained Earnings balance, which is a portion of Shareholders' Equity.

It doesn't "mean" anything in particular, but it might demonstrate that the company is struggling (in the second scenario).

Note: Note that **EQUITY VALUE** – AKA Market Cap – is different from Shareholders' Equity and that **Equity Value can never be negative**.

25. What is Working Capital? How is it used?

Working Capital = Current Assets – Current Liabilities.

If it's positive, it means a company can pay off its short-term Liabilities with its short-term Assets. It is often presented as a financial metric and its magnitude and sign (negative or positive) tells you whether or not the company is "sound."

You use **Operating Working Capital** more commonly in finance, and that is defined as (Current Assets Excluding Cash & Investments) – (Current Liabilities Excluding Debt).

The point of Operating Working Capital is to exclude items that relate to a company's **financing** and **investment** activities – Cash, Investments, and Debt – from the calculation.

"Changes in Working Capital" (more commonly called "Changes in Operating Assets and Liabilities") also appears on the Cash Flow Statement in Cash Flow from Operations and tells you how these *operationally-related* Balance Sheet items change over time.

26. "Short-Term Investments" is a Current Asset – should you count it in Working Capital?

No. If you wanted to be technical you could say that it *should* be included in "Working Capital," as defined, but left out of "Operating Working Capital."

But the truth is that no one lists Short-Term Investments in this section because Purchases and Sales of Investments are considered investing activities, **not** operational activities.

"Working Capital" is an imprecise idea and we prefer to say "Operating Assets and Liabilities" because that's a more accurate way to describe the concept of *operationally-related Balance Sheet items* – which may sometimes be Long-Term Assets or Long-Term Liabilities (e.g. Deferred Revenue).

27. What does negative (Operating) Working Capital mean? Is that a bad sign?

Not necessarily. It depends on the type of company and the specific situation – here are a few different things it could mean:

1. Some companies with subscriptions or longer-term contracts often have negative Working Capital because of **high Deferred Revenue** balances.
2. Retail and restaurant companies like Amazon, Wal-Mart, and McDonald's often have negative Working Capital because **customers pay upfront**, but they wait weeks or months to pay their suppliers – this is a sign of business efficiency and means that they always have healthy cash flow.
3. In other cases, negative Working Capital could point to financial trouble or possible bankruptcy (for example, when the company owes a lot of money to suppliers and cannot pay with cash on-hand).

28. What's the difference between cash-based and accrual accounting?

Cash-based accounting recognizes revenue and expenses when cash is actually received or paid out; accrual accounting recognizes revenue when collection is *reasonably certain* (i.e. after an invoice has been sent to the customer and the customer has a track record of paying on time) and recognizes expenses when they are incurred rather than when they are paid out in cash.

All large companies use accrual accounting because it more accurately reflects the timing of revenue and expenses; small businesses may use cash-based accounting to simplify their financial statements (you no longer need a Cash Flow Statement if everything is cash-based).

29. Let's say a customer pays for a TV with a credit card. What would this look like under cash-based vs. accrual accounting?

Under cash-based accounting, the revenue would not show up until the company charges the customer's credit card, receives authorization, and deposits the funds in its bank account – at which point it would add to Revenue on the Income Statement (and Pre-Tax Income, Net Income, etc.) and Cash on the Balance Sheet.

Under accrual accounting, it would show up as Revenue right away but instead of appearing in Cash on the Balance Sheet, it would go into Accounts Receivable at first. Then, once the cash is actually deposited in the company's bank account, it would move into the Cash line item and Accounts Receivable would go down.

30. Why do companies report GAAP or IFRS earnings, AND non-GAAP / non-IFRS (or "Pro Forma") earnings?

Many companies have non-cash charges such as Amortization of Intangibles, Stock-Based Compensation, and Write-Downs on their Income Statements, all of which negatively impact their Net Income.

Companies therefore report alternative "Pro Forma" metrics that exclude these expenses and paint a more favorable picture of their earnings, under the argument that these metrics better represent "true cash earnings."

31. A company has had positive EBITDA for the past 10 years, but it recently went bankrupt. How could this happen?

There are several possibilities:

1. The company is spending too much on Capital Expenditures – these are not reflected in EBITDA but represent true cash expenses, so CapEx alone could make the company cash flow-negative.
2. The company has high Interest Expense and is no longer able to afford its Debt.
3. The company's Debt all matures on one date and it is unable to refinance it due to a "credit crunch" – and it runs out of cash when paying back the Debt.
4. It has significant one-time charges (from litigation, for example) that have been excluded from EBITDA and those are high enough to bankrupt the company.

Remember, EBITDA excludes investment in (and Depreciation of) Long-Term Assets, Interest, and Non-Recurring Charges – and any one of those could represent massive cash expenses.

32. Normally Goodwill remains constant on the Balance Sheet – why would it be impaired and what does Goodwill Impairment mean?

Usually this happens when a company buys another one and the acquirer re-assesses what it really got out of the deal – customer relationships, brand name, and intellectual property – and finds that those "Assets" are worth significantly less than they originally thought.

It often happens in acquisitions where the buyer "overpaid" for the seller and it can result in extremely negative Net Income on the Income Statement.

It can also happen when a company discontinues part of its operations and must impair the associated Goodwill.

Single-Step Scenarios

With these questions, **keep in mind the 4 main categories of financial statement changes described above**.

Also remember that an Asset going up always *decreases* cash flow and a Liability going up always *increases* cash flow and vice versa, and that Assets must always equal Liabilities plus Equity.

Always assume a **40% tax rate** for these questions unless they tell you otherwise (state that upfront as you're walking through the answer) – it makes the math a lot easier.

You should always use this order when walking through these questions:

1. Income Statement
2. Cash Flow Statement
3. Balance Sheet

This is so you can check yourself at the end and make sure the Balance Sheet balances.

1. Walk me through how Depreciation going up by $10 would affect the statements.

Income Statement: Operating Income and Pre-Tax Income would decline by $10 and, assuming a 40% tax rate, Net Income would go down by $6.

Cash Flow Statement: The Net Income at the top goes down by $6, but the $10 Depreciation is a non-cash expense that gets added back, so overall Cash Flow

from Operations goes *up* by $4. There are no changes elsewhere, so the overall Net Change in Cash goes up by $4.

Balance Sheet: Plants, Property & Equipment goes down by $10 on the Assets side because of the Depreciation, and Cash is up by $4 from the changes on the Cash Flow Statement.

Here's What Happens on the Statements...		
Cash Changes By...	$	4
Shareholders' Equity Changes By...	$	(6)
Net Income Changes By....	$	(6)
Assets Side Changes By...	$	(6)
Liabilities & Equity Side Changes By...	$	(6)
Balance Sheet Still Balanced?		OK!

Overall, Assets is down by $6. Since Net Income fell by $6 as well, Shareholders' Equity on the Liabilities & Equity side is down by $6 and both sides of the Balance Sheet balance.

Intuition: We save on taxes with any non-cash charge, including Depreciation.

2. What happens when Accrued Expenses increases by $10?

For this question, remember that Accrued Expenses are recognized on the Income Statement but haven't been paid out in cash yet. So this could correspond to payment being set aside for an employee, but not actually the employee in cash yet.

Income Statement: Operating Income and Pre-Tax Income fall by $10, and Net Income falls by $6 (assuming a 40% tax rate).

Cash Flow Statement: Net Income is down by $6, and the increase in Accrued Expenses will *increase* Cash Flow by $10, so overall Cash Flow from Operations is up by $4 and the Net Change in Cash at the bottom is up by $4.

Balance Sheet: Cash is up by $4 as a result, so Assets is up by $4. On the Liabilities & Equity side, Accrued Expenses is a Liability so Liabilities is up by $10 and Shareholders' Equity

Here's What Happens on the Statements...		
Cash Changes By...	$	4
Shareholders' Equity Changes By...	$	(6)
Net Income Changes By....	$	(6)
Assets Side Changes By...	$	4
Liabilities & Equity Side Changes By...	$	4
Balance Sheet Still Balanced?		OK!

(Retained Earnings) is down by $6 due to the Net Income decrease, so both sides balance.

Intuition: We record an additional expense and save on taxes with it… but that expense hasn't been paid in cash yet, so our cash balance is actually *up*.

3. What happens when Accrued Expenses decreases by $10 (i.e. it's now paid out in the form of cash)? Do *not* take into account cumulative changes from previous increases in Accrued Expenses.

Assuming that you are **not taking into account any previous increases** (confirm this):

Income Statement: There are no changes.

Cash Flow Statement: The change in Accrued Expenses in the CFO section is negative $10 because you pay it out in cash, and so the cash at the bottom decreases by $10.

Here's What Happens on the Statements...	
Cash Changes By...	$ (10)
Shareholders' Equity Changes By...	$ -
Net Income Changes By....	$ -
Assets Side Changes By...	$ (10)
Liabilities & Equity Side Changes By...	$ (10)
Balance Sheet Still Balanced?	OK!

Balance Sheet: Cash is down by $10 on the Assets side and Accrued Expenses is down by $10 on the other side, so it balances.

Intuition: This is a simple cash payout of previously recorded expenses.

4. Accounts Receivable increases by $10. Walk me through the 3 statements.

If AR "increases" by $10, it means that we've recorded revenue of $10 but haven't *received* it in cash yet. For example, a customer has ordered a $10 product from us and we've delivered it, but we are still waiting on cash payment.

Income Statement: Revenue is up by $10 and so is Pre-Tax Income, which means that Net Income is up by $6 assuming a 40% tax rate.

Cash Flow Statement: Net Income is up by $6 but the AR increase is a reduction in cash (since we don't *have* the cash yet), so we need to subtract $10, which results in cash at the bottom being down by $4.

Balance Sheet: On the Assets side, Cash is down by $4 and AR is up by $10, so the Assets side is up by $6. On the other side, Shareholders' Equity is up by $6 because Net Income has increased by $6. Both sides balance.

Here's What Happens on the Statements...		
Cash Changes By...	$	(4)
Shareholders' Equity Changes By...	$	6
Net Income Changes By....	$	6
Assets Side Changes By...	$	6
Liabilities & Equity Side Changes By...	$	6
Balance Sheet Still Balanced?		OK!

Intuition: When AR increases, it means that we've paid taxes on additional revenue but haven't received any of that revenue in cash yet… so our cash balance decreases by the **additional amount of taxes** we've paid.

5. Prepaid Expenses decreases by $10. Walk me through the statements. Do *not* take into account cumulative changes from previous increases in Prepaid Expenses.

When Prepaid Expenses "decreases," it means that expenses are now recognized on the Income Statement. For example, we've previously paid for an insurance policy in cash and have now recognized that same expense on the IS.

Income Statement: Pre-Tax Income is down by $10, and Net Income is down by $6.

Cash Flow Statement: Net Income is down by $6 but since Prepaid Expenses is an Asset, a **decrease** of $10 results in an **increase** of 10 in cash. At the bottom of the CFS, cash is up by $4 as a result.

Here's What Happens on the Statements...		
Cash Changes By...	$	4
Shareholders' Equity Changes By...	$	(6)
Net Income Changes By....	$	(6)
Assets Side Changes By...	$	(6)
Liabilities & Equity Side Changes By...	$	(6)
Balance Sheet Still Balanced?		OK!

Balance Sheet: On the Assets side Cash is up by $4 and Prepaid Expenses is down by $10, so the Assets side is down by $6 overall. On the other side, Shareholders' Equity is down by $6 because of the

reduced Net Income, so both sides balance.

Intuition: Here, we're losing Net Income and paying additional taxes… but oh, wait, we've **already** paid out these expenses in cash previously! So our Cash balance goes *up* rather than down, despite the additional Income Statement expenses.

6. What happens when Inventory goes up by $10, assuming you pay for it with cash?

This really just means, "Walk me through what happens on the statements when you purchase $10 worth of Inventory with cash."

Income Statement: No changes.

Cash Flow Statement: Inventory is an Asset so that *reduces* Cash Flow from Operations – it goes down by $10, as does the Net Change in Cash at the bottom.

Here's What Happens on the Statements...	
Cash Changes By...	$ (10)
Shareholders' Equity Changes By...	$ -
Net Income Changes By....	$ -
Assets Side Changes By...	$ -
Liabilities & Equity Side Changes By...	$ -
Balance Sheet Still Balanced?	OK!

Balance Sheet: On the Assets side, Inventory is up by $10 but Cash is down by $10, so the changes cancel out and Assets still equals Liabilities & Equity.

Intuition: We've spent cash to buy Inventory, but haven't manufactured or sold anything yet.

7. A company sells some of its PP&E for $120. On the Balance Sheet, the PP&E is worth $100. Walk me through how the 3 statements change.

Income Statement: You record a Gain of $20 ($120 – $100), which boosts Pre-Tax Income by $20. At a 40% tax rate, Net Income is up by $12.

Cash Flow Statement: Net Income is up by $12, but you need to subtract out that Gain of $20, so Cash Flow from Operations is down by $8.

Then, in Cash Flow from Investing, you **record the entire amount of proceeds from the sale** – $120 – so that section is up by $120. At the bottom of the CFS, cash is therefore up by $112.

Balance Sheet: Cash is up by $112, but PP&E is down by $100 since we've sold it, so the Assets side is up by $12. The other side is up by $12 as well, since Shareholders' Equity is up by $12 due to the Net Income increase.

Here's What Happens on the Statements...	
Cash Changes By...	$ 112
Shareholders' Equity Changes By...	$ 12
Net Income Changes By....	$ 12
Assets Side Changes By...	$ 12
Liabilities & Equity Side Changes By...	$ 12
Balance Sheet Still Balanced?	OK!

Intuition: Gains and Losses are not *non-cash*, but they are *re-classified* on the CFS. The cash increase here simply reflects the after-tax profit from the Gain – if we had sold the PP&E at its Balance Sheet value, there would be no change on the IS.

8. Walk me through what happens on the 3 statements when there's an Asset Write-Down of $100.

Income Statement: The $100 Write-Down reduces Pre-Tax Income by $100. With a 40% tax rate, Net Income declines by $60.

Cash Flow Statement: Net Income is down by $60 but the Write-Down is a non-cash expense, so we add it back – and therefore Cash Flow from Operations increases by $40. Cash at the bottom is up by $40.

Here's What Happens on the Statements...	
Cash Changes By...	$ 40
Shareholders' Equity Changes By...	$ (60)
Net Income Changes By....	$ (60)
Assets Side Changes By...	$ (60)
Liabilities & Equity Side Changes By...	$ (60)
Balance Sheet Still Balanced?	OK!

Balance Sheet: Cash is now up by $40 and *an* Asset is down by $100 (it's not clear *which* Asset since the question never stated it). Overall, the Assets side is down by $60.

On the other side, since Net Income was down by $60, Shareholders' Equity is also down by $60 – and both sides balance.

Intuition: The same as any other non-cash charge: we save on taxes, so our Cash goes up, and something on the Balance Sheet changes in response.

Advanced Note: No, Write-Downs are not always tax-deductible like this – see the Advanced section for more.

9. Explain what happens on the 3 statements when a company issues $100 worth of shares to investors.

Income Statement: No changes (since this doesn't affect taxes and since the shares will be around for years to come).

Cash Flow Statement: Cash Flow from Financing is up by $100 due to this share issuance, so cash at the bottom is up by $100.

Balance Sheet: Cash is up by $100 on the Assets side and Shareholders' Equity (Common Stock & APIC) is up by $100 on the other side to balance it.

Here's What Happens on the Statements...	
Cash Changes By...	$ 100
Shareholders' Equity Changes By...	$ 100
Net Income Changes By....	$ -
Assets Side Changes By...	$ 100
Liabilities & Equity Side Changes By...	$ 100
Balance Sheet Still Balanced?	OK!

Intuition: This one does not affect taxes and does not correspond to the current period, so it doesn't show up on the IS – just like similar items, all that changes is Cash and then something else on the Balance Sheet.

10. Let's say we have the same scenario, but now instead of issuing $100 worth of stock to investors, the company issues $100 worth of stock to employees in the form of Stock-Based Compensation. What happens?

Income Statement: You need to record this as an additional expense because it's now a **tax-deductible** and a **current** expense – Pre-Tax Income falls by $100 and Net Income falls by $60 assuming a 40% tax rate.

Cash Flow Statement: Net Income is down by $60 but you add back the SBC of $100 since it's a non-cash charge, so cash at the bottom is up by $40.

Here's What Happens on the Statements...	
Cash Changes By...	$ 40
Shareholders' Equity Changes By...	$ 40
Net Income Changes By....	$ (60)
Assets Side Changes By...	$ 40
Liabilities & Equity Side Changes By...	$ 40
Balance Sheet Still Balanced?	OK!

Balance Sheet: Cash is up by $40 on the Assets side. On the other side, Common Stock & APIC is up by $100 due to the Stock-Based Compensation, but Retained Earnings is down by $60 due to the reduced Net Income, so Shareholders' Equity is up by $40 and both sides balance.

Intuition: This is a non-cash charge, so like all non-cash charges it impacts the IS and affects **one** Balance Sheet item in addition to Cash and Retained Earnings – in this case, it flows into Common Stock & APIC because that one reflects the market value of stock at the time the stock was issued. The cash increase here simply reflects the **tax savings**.

11. A company decides to issue $100 in Dividends – how do the 3 statements change?

Income Statement: No changes. Dividends count as a financing activity and are not tax-deductible, so they never appear on the IS.

Cash Flow Statement: Cash Flow from Financing is down by $100 due to the Dividends, so cash at the bottom is down by $100.

Balance Sheet: Cash is down by $100 on the Assets side, and Shareholders' Equity (Retained Earnings) is down by $100 on the other side so both sides balance.

Here's What Happens on the Statements...	
Cash Changes By...	$ (100)
Shareholders' Equity Changes By...	$ (100)
Net Income Changes By....	$ -
Assets Side Changes By...	$ (100)
Liabilities & Equity Side Changes By...	$ (100)
Balance Sheet Still Balanced?	OK!

Intuition: This is another *non-operational CFS / BS item*, so it is a simple use of cash and nothing else changes.

12. A company has recorded $100 in income tax expense on its Income Statement. All $100 of it is paid, in cash, in the current period. Now we change

it and only $90 of it is paid in cash, with $10 being deferred to future periods. How do the statements change?

Income Statement: Nothing changes. Both Current and Deferred Taxes are recorded simply as "Taxes" and Net Income remains the same. Net Income changes *only* if the **total amount of taxes** changes.

Cash Flow Statement: Net Income remains the same but we add back the $10 worth of Deferred Taxes in Cash Flow from Operations – no other changes, so cash at the bottom is up by $10.

Here's What Happens on the Statements...	
Cash Changes By...	$ 10
Shareholders' Equity Changes By...	$ -
Net Income Changes By....	$ -
Assets Side Changes By...	$ 10
Liabilities & Equity Side Changes By...	$ 10
Balance Sheet Still Balanced?	OK!

Balance Sheet: Cash is up by $10 and so the entire Assets side is up by $10. On the other side, the **Deferred Tax Liability** is up by $10 and so both sides balance.

Intuition: Deferred Taxes save us on cash in the current period, at the expense of additional cash taxes in the future.

13. Walk me through a $100 "bailout" of a company and how it affects the 3 statements.

First, confirm what type of "bailout" this is – Debt? Equity? A combination? The most common scenario here is an equity (or Preferred Stock) investment from the government, so here's what happens:

Income Statement: No changes.

Cash Flow Statement: Cash Flow from Financing goes up by $100 to reflect this new investment, so the Net Change in Cash is up by $100.

Balance Sheet: Cash is up by $100 so the Assets side is up by $100; on the other side, Shareholders' Equity goes up by $100 to make it balance (Common Stock & APIC for a normal equity investment or Preferred Stock for preferred).

Here's What Happens on the Statements...	
Cash Changes By...	$ 100
Shareholders' Equity Changes By...	$ 100
Net Income Changes By....	$ -
Assets Side Changes By...	$ 100
Liabilities & Equity Side Changes By...	$ 100
Balance Sheet Still Balanced?	OK!

Intuition: It's the same as a normal stock issuance: no Income Statement changes because nothing affects the company's taxes.

14. Walk me through a $100 Write-Down of Debt – as in OWED Debt, a Liability – on a company's Balance Sheet and how it affects the 3 statements.

This one is counter-intuitive. When a **Liability is written down** you record it as an **addition** on the Income Statement (with an asset write-down, it's a **subtraction**).

Income Statement: Pre-Tax Income goes **up** by $100, and assuming a 40% tax rate, Net Income is up by $60.

Cash Flow Statement: Net Income is up by $60, but we need to **subtract** that Debt Write-Down because it was non-cash – so Cash Flow from Operations is down by $40, and Cash is down by $40 at the bottom.

Balance Sheet: Cash is down by $40 so the Assets side is down by $40. On the other side, Debt is down by $100 but Shareholders' Equity is up by $60 because the Net Income was up by $60 – so Liabilities & Shareholders' Equity is down by $40 and both sides balance.

If this seems strange to you, you're not alone – click to read this Forbes article for more on why writing down debt actually benefits companies accounting-wise.

Intuition: One way to think about this is that writing down Assets is "bad" for us because it reduces our ability to generate future cash flow, but writing down Liabilities is "good" because it reduces our future expenses… sort of. I don't recommend presenting it like that in an interview.

15. Wait a minute – if writing down Liabilities boosts Net Income, why don't companies just do it all the time? It helps them out!

This is like asking, "If declaring bankruptcy helps you relieve your obligations, why not do it whenever you rack up debt?!"

And the answer is similar: Because it may help in the short-term, but in the long-term it hurts the company's credibility and ability to borrow in the future. If a company continually writes down its Liabilities, investors will stop trusting it – and the inability to borrow again will hurt it far more than a reduced Net Income would.

16. What's the difference between LIFO and FIFO? Can you walk me through an example of how they differ?

First, note that this question **does not apply to you if you're outside the US** because IFRS does not permit the use of LIFO. But you may want to read this anyway because it's good to know in case you ever work with US-based companies.

LIFO stands for "Last-In, First-Out" and FIFO stands for "First-In, First-Out" – they are 2 different ways of recording the value of Inventory and the Cost of Goods Sold (COGS).

With LIFO, you use the value of the **most recent Inventory additions** for COGS, but with FIFO you use the value of the **oldest Inventory additions** for COGS.

Here's an example: let's say your starting Inventory balance is $100 (10 units valued at $10 each). You add 10 units each quarter for $12 each in Q1, $15 each in Q2, $17 each in Q3, and $20 each in Q4, so that the total is $120 in Q1, $150 in Q2, $170 in Q3, and $200 in Q4.

You sell 40 of these units throughout the year for $30 each. In both LIFO and FIFO, you record 40 * $30 or $1,200 for the annual revenue.

The difference is that in LIFO, you would use the **40 most recent Inventory purchase values** – $120 + $150 + $170 + $200 – for the Cost of Goods Sold,

whereas in FIFO you would use the **40 oldest Inventory values** – $100 + $120 + $150 + $170 – for COGS.

As a result, the LIFO COGS would be $640 and FIFO COGS would be $540, so LIFO would also have lower Pre-Tax Income and Net Income. The ending Inventory value would be $100 higher under FIFO and $100 lower under LIFO.

If Inventory is getting more expensive to purchase, LIFO will produce higher values for COGS and lower ending Inventory values and vice versa if Inventory is getting cheaper to purchase.

Note: See the Interactive Quiz and the answer key there for a detailed walkthrough of this, with screen shots.

Multi-Step Scenarios

These questions get **tricky** because you need to keep track of many numbers in your head.

If you don't feel comfortable doing that, you can ask the interviewer if it's OK to write down a few figures as you're moving along – it's better to do that than to screw up the numbers.

One really important point on these questions: **always ask if you actually *need* to take into account cumulative changes**. Sometimes it's not necessary, and in the questions here and in the quiz we cover a mix of both question styles.

Luckily, there aren't *too* many crazy multi-step scenarios they can ask you about in interviews – if you understand all the questions below, the questions on our interactive quiz, and the 3-statement model, you'll be in great shape.

1. Let's say Apple is buying $100 worth of new iPad factories with debt. How are all 3 statements affected at the start of "Year 1," before anything else happens?

Income Statement: At the start of "Year 1," there are no changes yet.

Cash Flow Statement: The $100 worth of Capital Expenditures would show up under Cash Flow from Investing as a net *reduction* in Cash Flow (so Cash Flow is down by $100 so far). And the additional $100 worth of Debt raised would show up as an *addition* to Cash Flow in Cash Flow from Financing, canceling out the investment activity. So the cash number stays the same, for now.

Here's What Happens on the Statements...	
Cash Changes By...	$ -
Shareholders' Equity Changes By...	$ -
Net Income Changes By....	$ -
Assets Side Changes By...	$ 100
Liabilities & Equity Side Changes By...	$ 100
Balance Sheet Still Balanced?	OK!

Balance Sheet: There is now an additional $100 worth of factories, so PP&E is up by $100 and Assets is therefore up by $100. On the other side, Debt is up by $100, so the entire other side is up by $100 and both sides balance.

2. Now let's go out one year, to the start of Year 2. Assume the Debt is high-yield, so no principal is paid off, and assume an interest rate of 10%. Also assume the factories Depreciate at a rate of 10% per year. What happens now?

Assume that we have already factored in the changes from Part 1 and are only tracking what happens AFTER those have taken place.

After a year has passed, Apple must pay Interest Expense and must record the Depreciation.

Income Statement: Operating Income decreases by $10 due to the 10% Depreciation charge each year, and the $10 in additional Interest Expense decreases the Pre-Tax Income by $20 altogether ($10 from the Depreciation and $10 from Interest Expense).

Assuming a tax rate of 40%, Net Income falls by $12.

Cash Flow Statement: Net Income at the top is down by $12. Depreciation is a non-cash expense, so you add it back and the end result is that Cash Flow from Operations is down by $2.

That's the only change on the Cash Flow Statement, so overall Cash is down by $2.

Here's What Happens on the Statements...		
Cash Changes By...	$	(2)
Shareholders' Equity Changes By...	$	(12)
Net Income Changes By....	$	(12)
Assets Side Changes By...	$	(12)
Liabilities & Equity Side Changes By...	$	(12)
Balance Sheet Still Balanced?		OK!

Balance Sheet: On the Assets side, Cash is down by $2 and PP&E is down by $10 due to the Depreciation, so overall the Assets side is down by $12.

On the other side, since Net Income was down by $12, Shareholders' Equity is also down by $12 and both sides balance.

Remember that the Debt number itself does not change since we've assumed that nothing is paid back.

3. At the end of Year 2, the factories all break down and their value is written down to $0. The loan must also be paid back now. Walk me through how the 3 statements ONLY from the start of Year 2 to the end of Year 2.

After 2 years, the value of the factories is now $80 if we go with the 10% Depreciation per year assumption. It is this $80 that we will write down on the 3 statements. **Also, don't forget about the Interest Expense** – it still needs to be paid in Year 2.

Income Statement: We have $10 worth of Depreciation and then the $80 Write-Down. We also have $10 of additional Interest Expense, so Pre-Tax Income is down by $100. Net Income is down by $60 at a 40% tax rate.

Cash Flow Statement: Net Income is down by $60 but the Write-Down and Depreciation are both non-cash expenses, so we add them back and cash flow is up by $30 so far.

There are no changes under Cash Flow from Investing, but under Cash Flow from Financing there is a $100 charge for the loan payback – so Cash Flow from Financing falls by $100.

Overall, cash at the bottom decreases by $70.

Here's What Happens on the Statements...	
Cash Changes By...	$ (70)
Shareholders' Equity Changes By...	$ (60)
Net Income Changes By....	$ (60)
Assets Side Changes By...	$ (160)
Liabilities & Equity Side Changes By...	$ (160)
Balance Sheet Still Balanced?	OK!

Balance Sheet: Cash is now down by $70, and PP&E has decreased by $90, so the Assets side is down by $160.

On the other side, Debt is down $100 since it was paid off, and since Net Income was down by $60, Shareholders' Equity is down by $60. Both sides are down by $160 and balance.

NOTE: Be very careful with this type of question because there are many variations – when in doubt, always ask to clarify before you begin answering.

4. Now let's look at a different scenario and assume Apple is ordering $10 of additional iPad Inventory, using cash on hand. They order the Inventory, but they have not manufactured or sold anything yet – what happens to the 3 statements?

Income Statement: No changes.

Cash Flow Statement: Inventory is up by $10, so Cash Flow from Operations *decreases* by $10. There are no further changes, so overall Cash is down by $10.

Balance Sheet: Inventory is up by $10 and Cash is down by $10 so the Assets number stays the same and the Balance Sheet remains in balance.

5. Now let's say they sell the iPads for revenue of $20, at a cost of $10. Walk me through the 3 statements under this scenario.

Income Statement: Revenue is up by $20 and COGS is up by $10, so Gross Profit, Operating Income, and Pre-Tax Income are all up by $10. Assuming a 40% tax rate, Net Income is up by $6.

Cash Flow Statement: Net Income at the top is up by $6 and Inventory has decreased by $10 (since we just manufactured the Inventory into real iPads), which is a net *addition* to cash flow – so Cash Flow from Operations is up by $16 overall.

These are the only changes on the CFS, so cash at the bottom is up by $16.

Here's What Happens on the Statements...		
Cash Changes By...	$	16
Shareholders' Equity Changes By...	$	6
Net Income Changes By....	$	6
Assets Side Changes By...	$	6
Liabilities & Equity Side Changes By...	$	6
Balance Sheet Still Balanced?		OK!

Balance Sheet: Cash is up by $16 and Inventory is down by $10, so the Assets side is up by $6 overall.

On the other side, Net Income was up by $6, so Shareholders' Equity is up by $6 and both sides balance.

Intuition: This simply reflects the sale of products at a certain cost, and the after-tax profit from that. The only tricky part is how Cash increases by $16, not $6 – that just reflects the "release" you get from selling off the Inventory.

6. A company raises $100 worth of Debt, at 5% interest and 10% yearly principal repayment, to purchase $100 worth of Short-Term Securities with 10% interest attached. Walk me through how the 3 statements change IMMEDIATELY AFTER this initial purchase.

Income Statement: No changes yet.

Cash Flow Statement: The $100 Purchase of Short-Term Securities shows up as a reduction of cash flow under Cash Flow from Investing, and the $100 Debt raise shows up as a $100 increase under Cash Flow from Financing. Cash at the bottom is unchanged.

Here's What Happens on the Statements...		
Cash Changes By...	$	-
Shareholders' Equity Changes By...	$	-
Net Income Changes By....	$	-
Assets Side Changes By...	$	100
Liabilities & Equity Side Changes By...	$	100
Balance Sheet Still Balanced?		OK!

Balance Sheet: Short-Term Securities on the Assets side is up by $100, and Debt on the Liabilities side is up by $100 so both sides balance.

7. Now walk me through what happens at the end of Year 1, after the company has earned interest, paid interest, and paid back some of the debt principal.

Income Statement: Interest Income is $10 ($100 * 10%) and Interest Expense is $5 ($100 * 5%), so Pre-Tax Income increases by $5, and Net Income increases by $3 assuming a 40% tax rate.

Cash Flow Statement: Net Income is up by $3. In Cash Flow from Financing, we repay $10 worth of debt ($100 * 10%), so cash at the bottom is down by $7.

Balance Sheet: Cash on the Assets side is down by $7, so the Assets side is down by $7. On the other side, Debt is down by $10 due to the repayment and Shareholders' Equity (Retained Earnings) is up by $3 due to the Net Income, so this side is also down by $7 and the Balance Sheet balances.

Here's What Happens on the Statements...		
Cash Changes By...	$	(7)
Shareholders' Equity Changes By...	$	3
Net Income Changes By....	$	3
Assets Side Changes By...	$	(7)
Liabilities & Equity Side Changes By...	$	(7)
Balance Sheet Still Balanced?		OK!

8. Now let's say that at the end of year 1, the company sells the $100 of Short-Term Securities but gets a price of $110 for them instead. It also uses the proceeds to repay the $90 worth of remaining Debt.

Walk me through the statements after ONLY these changes.

Income Statement: You record a Gain of $10 ($110 – $100), so Pre-Tax Income is up by $10 and Net Income is up by $6 with a 40% tax rate.

Cash Flow Statement: Net Income is up by $6 but you subtract the Gain of $10, so Cash Flow from Operations is down by $4.

Under Cash Flow from Investing, you record the $110 sale as an **addition** to cash flow, so cash is up by $106 so far.

Then, under Cash Flow from Financing, you pay off $90 worth of Debt, which reduces cash by $90. Overall, Cash at the bottom is up by $16.

Here's What Happens on the Statements...		
Cash Changes By...	$	16
Shareholders' Equity Changes By...	$	6
Net Income Changes By....	$	6
Assets Side Changes By...	$	(84)
Liabilities & Equity Side Changes By...	$	(84)
Balance Sheet Still Balanced?		OK!

Balance Sheet: Cash on the Assets side is up by $16 but Short-Term Securities is down by $100, so the Assets side is down by $84.

On the other side, Debt is down by $90 but Shareholders' Equity (Retained Earnings) is up by $6 due to the Net Income increase, so that side is also down by $84 and both sides balance.

Accounting Questions & Answers – Advanced

Only go through these Advanced Questions if you have significant full-time work experience in finance.

If you don't, don't even worry about them – the topics here are **not** likely to come up in entry-level interviews. In fact, the chances are about 0.0001%.

These questions are more **conceptual** than the Basic questions – if you've made it this far, you already know how the 3 statements work.

So we go into the details of items like Deferred Tax Assets and Liabilities, Unrealized Gains / (Losses), Noncontrolling Interests, and other fun topics.

These topics are extremely broad so it's almost impossible to come up with "Rules of Thumb" for this section as we did for the Basic Questions. But if you're interviewing at this level you've probably learned these topics before and just need a review.

If you want to learn the **concepts** behind everything, check out the Advanced Financial Modeling course and sign up at a discounted, members-only rate.

Advanced Concepts

1. Explain what a Deferred Tax Asset or Deferred Tax Liability is. How do they usually get created?

A **Deferred Tax Liability (DTL)** means that you need to pay **additional cash taxes** in the future – you pay the same amount in total taxes over the long-term, but you paid less in cash taxes in prior years and you need to pay more in the future to make up for it.

A **Deferred Tax Asset (DTA)** means that you can pay **less in cash taxes** in the future – you've paid *more* in cash taxes in prior years, and now you'll pay less in the future.

Both DTLs and DTAs arise because of **temporary** differences between what a company can deduct for cash tax purposes and what they can deduct for book tax purposes.

You see them most often in these scenarios:

1. When companies record Depreciation differently for book and tax purposes (i.e. more quickly for tax purposes to save on taxes).
2. When Assets get written up for book, but not tax purposes, in M&A deals.
3. When a company has negative Pre-Tax Income, which results in Net Operating Losses (NOLs) and an increase in the DTA balance.
4. When pension contributions get recognized differently for book vs. tax purposes.

2. Wait a minute, then how can both DTAs and DTLs exist at the same time on a company's Balance Sheet? How can they both owe *and* save on taxes in the future?

This one's subtle, but you frequently see both of these items on the statements **because a company can *owe* and *save on* future taxes – for different reasons**.

For example, the company might have had negative Pre-Tax Income in early years, resulting in an NOL balance and a Deferred Tax Asset (which represents the future *tax savings* from using NOLs to reduce taxable income).

But the company might also record accelerated Depreciation for tax purposes but straight-line it for book purposes, which would result in a DTL in early years.

3. How do Income Taxes Payable and Income Taxes Receivable differ from DTLs and DTAs? Aren't they the same concept?

They are similar, but *not* the same exact idea. Income Taxes Payable and Receivable are **accrual** accounts for taxes that are owed for the **current year**.

For example, if a company owes $300 in taxes at the end of each quarter during the year, on its monthly financial statements it would increment Income Taxes Payable by $100 each month until it pays out everything in the cash at the end of 3 months, at which point Income Taxes Payable would decrease once again.

By contrast, DTAs and DTLs tend to be longer-term and arise because of events that do NOT occur in the normal course of business.

4. Walk me through how you project revenue for a company.

The simplest way to do it is to assume a percentage growth rate – for example, 15% in year 1, 12% in year 2, 10% in year 3, and so on, usually decreasing significantly over time.

To be more precise, you could create a **bottoms-up build** or a **tops-down build:**

- **Bottoms-Up:** Start with individual products / customers, estimate the average sale value or customer value, and then the growth rate in customers / transactions and customer / transaction values to tie everything together.
- **Tops-Down:** Start with "big-picture" metrics like overall market size, and then estimate the company's market share and how that will change in coming years and multiply to get to their revenue.

Of these two methods, **bottoms-up** is more common and is taken more seriously because estimating "big-picture" numbers is almost impossible.

5. Walk me through how you project expenses for a company.

The simplest method is to make each Income Statement expense a percentage of revenue and hold it fairly constant, maybe decreasing the percentages slightly (due to economies of scale), over time.

For a more complex method, you could start with each department of a company, the number of employees in each, the average salary, bonuses, and benefits, and then make assumptions for those going forward.

Usually you assume that the number of employees is tied to revenue, and then you assume growth rates for salary, bonuses, benefits, and other metrics.

Cost of Goods Sold should be tied directly to Revenue and each "unit" sold should incur an expense.

Other items such as rent, Capital Expenditures, and miscellaneous expenses are linked to the company's internal plans for building expansion plans (if they have them), or to Revenue in a simpler model.

6. How do you project Balance Sheet items like Accounts Receivable and Accrued Expenses over several years in a 3-statement model?

Normally you assume that these are percentages of revenue or expenses, under the assumption that they're all linked to the Income Statement:

- **Accounts Receivable:** % of Revenue.
- **Prepaid Expense:** % of Operating Expenses.
- **Inventory:** % of COGS.
- **Deferred Revenue:** % of Revenue.
- **Accounts Payable:** % of Operating Expenses.
- **Accrued Expenses:** % of Operating Expenses.

Then you either carry the same percentages across in future years or assume slight increases or decreases depending on the company.

You can also project these metrics using "days," e.g. Accounts Receivable Days = Accounts Receivable / Revenue * 365, assume that the days required to collect AR stays relatively the same each year, and calculate the AR number from that.

7. How should you project Depreciation and Capital Expenditures?

You could use several different approaches here:

- **Simplest:** Make each one a % of revenue.
- **Alternative:** Make Depreciation a % of revenue, but for CapEx average several years of previous CapEx, or make it an absolute dollar change (e.g. it increases by $100 each year) or percentage change (it increases by 2% each year).
- **Complex:** Create a PP&E schedule, where you estimate a CapEx increase each year based on management's plans, and then Depreciate existing PP&E using each asset's useful life and the straight-line method; also Depreciate new CapEx right after it's added, using the same approach.

8. Let's take a step back… there's usually a "simple" and "complex" way of projecting a company's financial statements. Is there a real advantage to using the complex method? In other words, does it give us better numbers?

In short, **no**. The complex methods give you similar numbers most of the time – you're not using them to get *better* numbers, but rather to get better **support** for those numbers.

If you just say, "Revenue grows by 10% per year!" there isn't much evidence to back up that claim.

But if you create a bottoms-up revenue model by segment, then you can say, "The 10% growth is driven by a 5% price increase in this segment, a 10% increase in units sold here, 15% growth in units sold in this geography" and so on.

9. What are examples of non-recurring charges we need to add back to a company's EBIT / EBITDA when analyzing its financial statements?

- Restructuring Charges
- Goodwill Impairment
- Asset Write-Downs
- Bad Debt Expenses

- One-Time Legal Expenses
- Disaster Expenses
- Changes in Accounting Policies

Note that to qualify as an "add-back" or "non-recurring" charge for EBITDA / EBIT purposes, it **needs to affect Operating Income on the Income Statement**. So if one of these charges is "below the line," then you do not add it back for the EBITDA / EBIT calculation.

Also note that you **do** add back Depreciation, Amortization, and sometimes Stock-Based Compensation when calculating EBITDA, but that these are not "non-recurring charges" because all companies have them every year – they're just **non-cash charges**.

10. What's the difference between capital leases and operating leases? How do they affect the statements?

Operating Leases are used for short-term leasing of equipment and property, and do not involve ownership of anything. Operating lease expenses show up as Operating Expenses on the Income Statement and impact Operating Income, Pre-Tax Income, and Net Income.

Capital Leases are used for longer-term items and give the lessee ownership rights; they Depreciate, incur Interest Expense, and are counted as Debt.

A lease is a capital lease if any **one** of the following 4 conditions is true:

1. If there's a transfer of ownership at the end of the term.
2. If there's an option to purchase the asset at a "bargain price" at the end of the term.
3. If the term of the lease is greater than 75% of the useful life of the asset.
4. If the present value of the lease payments is greater than 90% of the asset's fair market value.

11. How do Net Operating Losses (NOLs) affect a company's 3 statements?

The key point is that **nothing changes on the Income Statement when NOLs are accrued or used**. You only adjust for these items on the Cash Flow Statement and Balance Sheet.

Example: Let's say a company has Pre-Tax Income of negative $100. It still records its taxes using its Tax Rate * ($100), so they are actually shown as a *Tax Benefit* on the IS… but then you adjust on the Cash Flow Statement because, in reality, the company pays $0 in cash taxes in this situation.

So the Income Statement says, "Woohoo! We get a tax benefit of $40." But then the CFS says, "Nope, sorry, no tax benefit so we'll have to adjust cash flow down by $40… which we record as an increase to the DTA."

Then, if the company can apply its NOL balance to offset positive Pre-Tax Income in the future, normal taxes are still shown on the Income Statement – but you adjust the DTA and cash flow to reflect its reduced taxes.

Net Operating Losses are off-Balance Sheet, and the Deferred Tax Asset changes by (NOLs Created – NOLs Used) * Tax Rate each year:

Tax Rate:	40%	
Beginning Net Operating Loss (NOL) Balance:	$ 175	

Combined Company:	Year 1	Year 2	Year 3	
Pre-Tax Income:	$ 100	$ (200)	$ 300	<-- These are what appear on the Income Statement.
Income Taxes:	40	(80)	120	<-- Pre-Tax Income * Tax Rate.
Beginning NOL Balance:	175	75	275	<-- The NOL Balance itself is **NOT** on the Balance Sheet! It's a separate item!
Plus: NOLs Created:	-	200	-	<-- If Pre-Tax Income is negative, add to the NOL balance; otherwise add $0.
Less: NOLs Used:	(100)	-	(275)	<-- Apply either the lesser of the total remaining NOLs, or the Pre-Tax Income..
Ending NOL Balance:	**$ 75**	**$ 275**	**$ -**	...but if Pre-Tax Income is negative, just use $0 - nothing to offset.
NOL-Adjusted Pre-Tax Income:	**-**	**(200)**	**25**	
Cash Taxes Payable:	**$ -**	**$ -**	**$ 10**	
Increase / (Decrease) in DTA:	(40)	80	(110)	<-- DTA will decrease each year that we use NOLs, and will increase whenever we accumulate NOLs from taking losses.

12. What's the difference between Tax Benefits from Stock-Based Compensation and Excess Tax Benefits from Stock-Based Compensation? How do they impact the statements?

Tax Benefits simply record what the company has saved in taxes as a result of issuing Stock-Based Compensation (e.g. they issue $100 in SBC and have a 40% tax rate so they save $40 in taxes).

Excess Tax Benefits are a **portion** of these normal Tax Benefits and represent the amount of taxes they've saved due to share price increases (i.e. the Stock-Based Compensation is worth **more** due to a share price increase since they announced plans to issue it).

Neither one is a separate item on the Income Statement.

On the Cash Flow Statement, Excess Tax Benefits are subtracted out of Cash Flow from Operations and added to Cash Flow from Financing, effectively "re-classifying" them. Basically you're saying, "We've gotten some extra cash flow from our share price increasing, so let's call it what it is: a financing activity."

Also on the CFS, you **add back** the Tax Benefits in Cash Flow from Operations.

You do that because you want them to accrue to **Additional Paid-In Capital (APIC)** on the Balance Sheet. You're saying, "In addition to the additional value we created with this stock/option issuance, we've also gotten some value from the tax savings… so let's make reflect that value along with the SBC itself under APIC."

13. Let's say you're creating quarterly projections for a company rather than annual projections. What's the best way to project revenue growth each quarter?

It's best to split out the historical data by quarters and then to analyze the Year-over-Year (YoY) Growth for **each quarter**. For example, in Quarter 1 of Year 2

you would look at how much the company has grown revenue by in Quarter 1 of previous years.

It wouldn't make much sense to use *Quarter-over-Quarter* growth (i.e. Quarter 1 over Quarter 4 in the previous year) because many companies are seasonal.

The same applies for expenses as well: always make sure you take into account seasonality with quarterly projections.

14. What's the purpose of calendarizing financial figures?

"Calendarizing" means "Rather than using a company's normal fiscal year figures, let's use *another* year-long period during the year and calculate their revenue, expenses, and other key metrics for that period."

For example, a company's fiscal year might end on December 31 – if you calendarized it, you might look at the period from June 30 in the previous year to June 30 of this year rather than the traditional January 1 – December 31 period.

You do this most frequently with public comps (see the section on Valuation), because companies often have "misaligned" fiscal years. If one company's year ends December 31, another's ends June 30, and another's ends September 30, you need to adjust and use the same period for all of them – otherwise you're comparing apples to oranges because the financial figures are all from different time periods.

15. What happens to the Deferred Tax Asset / Deferred Tax Liability line item if we record accelerated Depreciation for tax purposes, but straight-line Depreciation for book purposes?

If Depreciation is **higher** on the tax schedule in the first few years, the Deferred Tax Liability will **increase** because you're paying less in cash taxes initially and need to make up for it later.

Then, as tax Depreciation switches and becomes **lower** in the later years, the DTL will **decrease** as you pay more in cash taxes and "make up for" the early tax savings.

16. If you own over 50% but less than 100% of another company, what happens on the financial statements when you record the acquisition?

This scenario refers to a **Noncontrolling Interest** (AKA Minority Interest)**:** you consolidate all the financial statements and add 100% of the other company's statements to your own.

It's similar to a 100% acquisition where you do the same thing, but you also create a new item on the Liabilities & Equity side called a **Noncontrolling Interest** to reflect the portion of the other company that you *don't* own (e.g. if it's worth $100 and you own 70%, you would list $30 here).

Just like with normal acquisitions, you also wipe out the other company's Shareholders' Equity when you combine its statements with yours, and you still allocate the purchase price (see the Merger Model section for more on that).

You also **subtract Net Income Attributable to Noncontrolling Interests** on the Income Statement – in other words, the other company's Net Income * Percentage You Do *Not* Own. But then you add it back on the Cash Flow Statement in the CFO section. That is just an accounting rule and has no cash impact.

On the Balance Sheet, the Noncontrolling Interest line item **increases** by that number (Net Income Attributable to Noncontrolling Interests) each year. Retained Earnings **decreases** by that same number each year because it reduces Net Income, so the Balance Sheet remains in balance.

17. What about if you own between 20% and 50% of another company? How do you record this acquisition and how are the statements affected?

This case refers to an **Equity Interest** (AKA Associate Company) – here, you do **not** consolidate the statements at all.

Instead, you reflect Percentage of Other Company That You Own * Value of Other Company and show it as an Asset on the Balance Sheet (Investments in Equity Interests). For example, if the other company is worth $200 and you own 30% of it, you record $60 for the Investments in Equity Interests line item.

You also add Other Company's Net Income * Percentage Ownership to your own Net Income on the Income Statement, and then subtract it on the Cash Flow Statement because it's a non-cash addition.

Each year, the Investments in Equity Interests line item increases by that number, and it decreases by any dividends issued *from* that other company *to* you. On the other side, Retained Earnings will also change based on the change in Net Income, so everything balances.

18. What if you own less than 20% of another company?

This is where it gets inconsistent. Some companies may still apply the Equity Interest treatment in this case, especially if they exert "significant influence" over the other company.

But sometimes they may also classify it as a simple Investment or Security on their Balance Sheet (see the next few questions), acting as if they have simply bought a stock or bond and ignoring the other company's financials.

19. What are the different classifications for Securities that a company can use on its Balance Sheet? How do they differ?

- **Trading:** These Securities are very short-term and you count all Gains and Losses on the Income Statement, even if they're unrealized (i.e. you haven't sold the Securities yet).
- **Available for Sale (AFS):** These Securities are longer-term and you don't report Gains or Losses on the Income Statement – they appear under

Accumulated Other Comprehensive Income (AOCI). The Balance Sheet values of these Securities also change over time because you mark them to market.

- **Held-to-Maturity (HTM):** These Securities are even longer-term, and you don't report unrealized Gains or Losses anywhere. Gains and Losses are only reported when they're actually sold.

Advanced Changes and Scenarios

"But wait," you say, "What other changes to the financial statements could we possibly have *besides* everything you've covered in the Basic section?"

As it turns out, there **a lot** of new questions since there are quite a few **advanced** items on the financial statements.

These are *not* likely interview questions, but we are including them anyway in case you do have more advanced knowledge or you've worked on deals where they have come up.

Once again, **skip these questions for entry-level interviews** – it's overkill and you're not going to get questions on such advanced topics.

1. You own 70% of a company that generates Net Income of $10. Everything *above* Net Income on your Income Statement has already been consolidated.

Walk me through how you would recognize Net Income Attributable to Noncontrolling Interests, and how it affects the 3 statements.

Income Statement: You show a line item for "Net Income Attributable to Noncontrolling Interests" near the bottom. You **subtract $3** (Other Company Net Income of $10 * 30% You Don't Own) to reflect the 30% of the other company's Net Income that does *not* "belong" to you.

At the bottom of the Income Statement, the "Net Income Attributable to Parent" line item is down by $3.

Cash Flow Statement: Net Income is down by $3 as a result, but you add back this same charge because you **do, in fact, receive this Net Income in cash** when you own over 50% of the other company.

So cash at the bottom of the CFS remains unchanged.

Balance Sheet: There are no changes on the Assets side. On the other side, the Noncontrolling Interests line item (included in Shareholders' Equity) is **up by $3** due to this Net Income, but Retained Earnings is down by $3 because of the reduced Net Income at the bottom of the Income Statement, so this side doesn't change and the Balance Sheet remains in balance.

2. Let's continue with the same example, and assume that this other company issues Dividends of $5. Walk me through how that's recorded on the statements.

Income Statement: There are no changes because **Dividends never show up** on the Income Statement.

Cash Flow Statement: There's an additional Dividend of $5 under Cash Flow from Financing on the CFS, so cash is initially down by $5… but remember that we own 70% of this other company, so we actually get 70% * $5, or $3.5 in cash, and cash only decreases by $1.5 as a result (this might be shown as some type of adjusting entry on the Cash Flow Statement).

Balance Sheet: The Assets side is down by $1.5 as a result and Shareholders' Equity (Retained Earnings) is also down by $1.5.

Remember that the other company's financial statements are consolidated with your own when you own over 50% – you only split out Net Income separately (and show adjusting entries when appropriate for other items).

3. Now let's take the opposite scenario and say that you own 30% of another company. The other company earns Net Income of $20. Walk me through the 3 statements after you record the portion of Net Income that's you're entitled to.

Here, nothing has been consolidated because we own less than 50% of the other company. So nothing on the statements yet reflects this other company.

Income Statement: We create an item "Net Income from Equity Interests" (or something similar) below our normal Net Income at the bottom, which results in our *real* Net Income (Net Income Attributable to Parent) increasing by $6 ($20 * 30%).

Cash Flow Statement: Net Income is up by $6, but we **subtract this** $6 of additional Net Income because we haven't *really* received it in cash when we own less than 50% - it's not as if we control the other company and can just "take it." Cash remains unchanged.

Balance Sheet: The Investments in Equity Interests item on the Assets side increases by $6 to reflect this Net Income, so the Assets side is up by $6. On the other side, Shareholders' Equity (Retained Earnings) is up by $6 to reflect the increased Net Income, so both sides balance.

4. Now let's assume that this 30% owned company issues Dividends of $10. Taking into account the changes from the last question, walk me through the 3 statements again and explain what's different now.

Income Statement: It's the same: Net Income is up by $6 at the bottom.

Cash Flow Statement: Net Income is up by $6 and we then subtract out the $6 that's attributable to the Equity Interests…

And then we ADD $3 ($10 * 30%) in the Cash Flow from Operations section to reflect the Dividends that we receive from these Equity Interests.

So cash at the bottom is up by $3.

Balance Sheet: Cash is up by $3 on the Assets side, and the Investments in Equity Interests line item is up by $6… but it falls by $3 due to those Dividends, so the Assets side is up by $6 total.

On the other side, Net Income is up by $6 so Shareholders' Equity (Retained Earnings) is up by $6 and both sides balance.

The **Investments in Equity Interests** line item is like a "mini-Shareholder's Equity" for companies that you own less than 50% of – you add however much Net Income you can "claim," and then subtract your portion of the Dividends.

Remember that *only* the Dividends the parent company itself issues show up in the Cash Flow from Financing section – Dividends **received** from other companies (such as what you see in this example) do not.

5. What if you now only own 10% of this company? Would anything change?

In theory, yes, because when you own less than 20%, the other company should be recorded as a Security or Short-Term Investment and you would only factor in the Dividends received but not the Net Income from the Other Company.

In practice, however, treatment varies and some companies may actually record this scenario the same way, especially if they exert "significant influence" over the 10% owned company.

6. Walk me through what happens when you pay $20 in interest on Debt, with $10 in the form of cash interest and $10 in the form of Paid-in-Kind (PIK) interest.

Income Statement: Both forms of interest appear, so Pre-Tax Income falls by $20 and Net Income falls by $12 at a 40% tax rate.

Cash Flow Statement: Net Income is down by $12 but you add back the $10 in PIK interest since it's non-cash, so Cash Flow from Operations is down by $2. Cash at the bottom is also down by $2 as a result.

Balance Sheet: Cash is down by $2 so the Assets side is down by $2. On the other side, **Debt increases by $10 because PIK interest accrues to Debt**, but Shareholders' Equity (Retained Earnings) falls by $12 due to the reduced Net Income, so this side is also down by $2 and both sides balance.

PIK Interest is just like any other non-cash charge: it reduces taxes but **must affect *something* on the Balance Sheet** – in this case, that's the existing Debt number.

7. Due to a high issuance of Stock-Based Compensation and a fluctuating stock price, a company has recorded a significant amount of Tax Benefits from Stock-Based Compensation and Excess Tax Benefits from Stock-Based Compensation.

Assume that it records $100 in Tax Benefits from SBC, with $40 of Excess Tax Benefits from SBC, and walk me through the 3 statements. Ignore the original Stock-Based Compensation issuance.

Income Statement: No changes.

Cash Flow Statement: You **add back the $100** in Tax Benefits from SBC in Cash Flow from Operations, and *subtract out* the $40 in Excess Tax Benefits, so CFO is up by $60.

Then, under Cash Flow from Financing, you **add back the $40** in Excess Tax Benefits, so Cash at the bottom is up by $100.

Balance Sheet: Cash is up by $100, so the Assets side is up by $100. On the other side, Common Stock & APIC is up by $100 because Tax Benefits from SBC flow directly into there.

The rationale: Essentially we're "re-classifying" the Tax Benefits OUT of Cash Flow from Operations and saying that they should accrue to the company's Shareholders' Equity. And we are also saying that *Excess Tax Benefits* (which arise due to share price increases) should be counted as a Financing activity but should **not** impact cash, since they're already a *part* of the normal Tax Benefits.

8. A company records Book Depreciation of $10 per year for 3 years. On its Tax financial statements, it records Depreciation of $15 in year 1, $10 in year 2, and $5 in year 3.

Walk me through what happens on the BOOK financial statements in Year 1.

Income Statement: On the Book Income Statement you list the Book Depreciation number, so Pre-Tax Income falls by $10 and Net Income falls by $6 with a 40% tax rate.

On the *Tax* Income Statement, Depreciation was $15 so Net Income fell by $9 rather than $6. Taxes fell by **$2 more** on the Tax version (assume that prior to the changes, Pre-Tax Income was $100 and Taxes were $40… Book Pre-Tax Income afterward was therefore $90 and Tax Pre-Tax Income was $85. Book Taxes were $36 and Cash Taxes were $34, so Book Taxes fell by $4 and Cash Taxes fell by $6).

Cash Flow Statement: On the Book Cash Flow Statement, Net Income is down by $6, but you add back the Depreciation of $10 **and you add back $2 worth of Deferred Taxes** – that represents the fact that Cash Taxes were **lower** than Book Taxes in Year 1.

At the bottom, Cash is up by $6.

Balance Sheet: Cash is up by $6 but PP&E is down by $10 due to the Depreciation, so the Assets side is down by $4.

On the other side, the Deferred Tax Liability increases by $2 due to the Book / Cash Tax difference, but Shareholders' Equity (Retained Earnings) is down by $6 due to the lower Net Income, so both sides are down by $4 and balance.

9. Now let's move to Year 2. What happens?

This one's easy, because now Book and Tax Depreciation are the same.

Income Statement: Pre-Tax Income is down by $10 so Net Income falls by $6.

Cash Flow Statement: Net Income is down by $6 and you add back the $10 of Depreciation on the CFS, but there are no changes to Deferred Taxes because Book Depreciation = Tax Depreciation and therefore Book Taxes = Cash Taxes this year. Cash at the bottom increases by $4.

Balance Sheet: Cash is up by $4 but PP&E is down by $10, so the Assets side is down by $6. The other side is also down by $6 because Shareholders' Equity (Retained Earnings) is lower due to the reduced Net Income.

10. And finally, let's move to Year 3 – walk me through what happens on the statements now.

Income Statement: On the Book Income Statement, you use the Book Depreciation number so Pre-Tax Income falls by $10 and Net Income falls by $6 with a 40% tax rate.

On the *Tax* Income Statement, Depreciation was $5 so Net Income fell by $3 rather than $6. Taxes fell by **$2 more** on the Tax version (assume that prior to the changes, Pre-Tax Income was $100 and Taxes were $40… Book Pre-Tax Income afterward was therefore $90 and Tax Pre-Tax Income was $95. Book Taxes were $36 and Cash Taxes were $38, so Book Taxes fell by $4 and Cash Taxes fell by $2).

Cash Flow Statement: On the Book Cash Flow Statement, Net Income is down by $6, but you add back the Depreciation of $10 **and you subtract out $2 worth of additional Cash Taxes** – that represents the fact that Cash Taxes were higher than Book Taxes in Year 1 (meaning that you're now paying extra to make "catch-up payments").

At the bottom, Cash is up by $2.

Balance Sheet: Cash is up by $2 but PP&E is down by $10 due to the Depreciation, so the Assets side is down by $8.

On the other side, the Deferred Tax Liability **decreases** by $2 due to the Book/Cash Tax difference and Shareholders' Equity (Retained Earnings) is down by $6 due to the reduced Net Income, so both sides are down by $8 and balance.

11. A company you're analyzing records a Goodwill Impairment of $100. However, this Goodwill Impairment is NOT deductible for cash tax purposes. Walk me through how the 3 statements change.

Income Statement: You still reduce Pre-Tax Income by $100 due to the Impairment, so Net Income falls by $60 at a 40% tax rate – when it's not tax-deductible, you make that adjustment via Deferred Tax Liabilities or Deferred Tax Assets.

On the *Tax* Income Statement, Pre-Tax Income has not fallen at all and so Net Income stays the same… which means that Cash Taxes are $40 **higher** than Book Taxes.

Cash Flow Statement: Net Income is down by $60, but we add back the $100 Impairment since it is non-cash.

Then, we **also subtract $40 from Deferred Taxes because Cash Taxes were higher than Book Taxes by $40** – meaning that we'll save some cash (on paper) from reduced Book Income Taxes in the future. Adding up all these changes, there are no net changes in Cash.

Balance Sheet: Cash is the same but Goodwill is down by $100 due to the Impairment, so the Assets side is down by $100.

On the other side, the Deferred Tax Liability is down by $40 and Shareholders' Equity (Retained Earnings) is down by $60 due to the reduced Net Income, so both sides are down by $100 and balance.

Intuition: When a charge is *not* truly tax-deductible, a firm pays higher Cash Taxes and either "makes up for" owed future tax payments or gets to report lower Book Taxes in the future.

Remember that DTLs get created when additional future cash taxes are **owed** – when additional future cash taxes are **paid**, DTLs decrease.

12. How can you tell whether or not a Goodwill Impairment will be tax-deductible?

There's no way to know for sure unless the company states it, but generally Impairment on Goodwill from acquisitions is *not* deductible for tax purposes.

If it were, companies would have a massive incentive to start writing down the values of their acquisitions and saving on taxes from non-cash charges – which the government wouldn't like too much.

Goodwill arising from other sources may be tax-deductible, but it's rare to see significant Impairment charges unless they're from acquisitions.

13. A company has a Net Operating Loss (NOLs) balance of $100 due to losses in prior years.

The company finally generates a Pre-Tax Income of positive $200 this year. Walk me through the 3 statements, assuming a 40% tax rate.

Income Statement: The company still records Pre-Tax Income of $200, Taxes of $80, and Net Income of $120. Remember, NOLs do **not** affect the book version of the Income Statement.

Cash Flow Statement: Net Income at the top is up by $120.

Since the company can apply $100 of NOLs to offset its $200 in Pre-Tax Income, in reality it only pays taxes on $100 of Pre-Tax Income, so its cash taxes are $40 rather than $80. You record this as the Deferred Tax Asset decreasing by $40. So Cash Flow from Operations and cash at the bottom of the CFS are both up by $160.

Balance Sheet: Cash on the Assets side is up by $160, but the Deferred Tax Asset is down by $40, so the Assets side is up by $120. The L&E side is also up by $120 because of the $120 in Net Income on the Income Statement, which flows into Shareholders' Equity.

14: You're analyzing a company's financial statements and you need to calendarize the revenue, EBITDA, and other items.

The company has earned revenue of $1000 and EBITDA of $200 from January 1 to December 31, 2050. From January 1 to March 31, 2050, it earned revenue of $200 and EBITDA of $50. From January 1 to March 31, 2051, it earned revenue of $300 and EBITDA of $75.

What are the company's revenue and EBITDA for the Trailing Twelve Months as of March 31, 2051?

Trailing Twelve Months (TTM) = New Partial Period + Twelve-Month Period – Old Partial Period

So in this case, TTM Revenue = $300 + $1000 – $200 = $1100 and TTM EBITDA = $75 + $200 – $50 = $225.

15. A company acquires another company for $1000 using 50% stock and 50% cash. Here's what the other company looks like:

- **Assets of $1000 and Liabilities of $800.**

Using that information, combine the companies' financial statements and walk me through what the Balance Sheet looks like IMMEDIATELY after the acquisition.

The acquirer has used $500 of cash and $500 of stock to acquire the seller, and the seller's Assets are worth $1000, with Liabilities of $800 and therefore Equity of $200.

In an M&A deal the Equity of the seller gets wiped out completely. So you simply add the seller's Assets and Liabilities to the acquirer's – the Assets side is up by $1000 and the Liabilities side is up by $800.

Then, you subtract the cash used, so the Assets side is up by $500 only, and the other side is up by $1300 due to the $800 of Liabilities and the $500 stock issuance.

Our Balance Sheet is out of balance… and that's why we need **Goodwill**. Goodwill equals the Purchase Price Minus the Seller's Book Value, so in this case it's equal to $1000 – $200, or $800.

That $800 of Goodwill gets created on the Assets side, and so both sides are now up by $1300 and the Balance Sheet balances.

16. You're analyzing a company with $100 in Short-Term Investments on its Balance Sheet. These Investments are classified as Available-for-Sale (AFS) Securities.

The market value for these securities increases to $110. Walk me through what happens on the 3 statements.

Income Statement: Since these are AFS securities, you do **not** reported Unrealized Gains and Losses on the Income Statement. There are no changes.

Cash Flow Statement: There are no changes because **no cash accounts** change.

Balance Sheet: The Short-Term Investments line item increases by $10 on the Assets side and Accumulated Other Comprehensive Income (AOCI) increases by $10 on the other side under Shareholders' Equity, so the Balance Sheet balances.

17. Now let's say that these were classified as Trading Securities instead – walk me through the 3 statements after their value increases by $10.

With Trading Securities, you **do** show Unrealized Gains and Losses on the Income Statement.

Income Statement: Both Operating Income and Pre-Tax Income increase by $10, and so Net Income increases by $6 at a 40% tax rate.

Cash Flow Statement: Net Income is up by $6, but you subtract the Unrealized Gain of $10 because it's non-cash, so Cash at the bottom is down by $4.

Balance Sheet: Cash is down by $4 on the Assets side and Short-Term Investments is up by $10, so the Assets side is up by $6 overall.

On the other side, Shareholders' Equity (Retained Earnings) is up by $6 due to the increased Net Income.

Intuition: We've paid taxes on a *non-cash* source of income, so cash is down. However, the paper value of our Assets has increased.