Financial Modeling Fundamentals – Module 10 M&A Deals and Merger Models – Quiz Questions

1. **Why would one company want to acquire another company?**

    a. To boost its EPS and realize an internal rate of return (IRR) that exceeds its targeted return, or its weighted average cost of capital (WACC).

    b. The acquirer wants to expand its market share or gain customers in a different geography or sub-industry.

    c. The target company is about to kill the acquirer's business, so the acquirer buys the target as a defensive move.

    d. The acquirer is driven by egos and irresponsible corporate executives, and one executive is trying to back-stab another one by pushing for a big acquisition.

    e. All of the above.

2. **Which of the following can a buyer use to purchase a seller?**

    a. Cash.

    b. New debt issued.

    c. The buyer's existing debt.

    d. New stock issued.

    e. Existing stock owned by institutional shareholders.

3. **Please consider the Excel screenshot shown below, which lists the Transaction Assumptions for Company A's acquisition of Company B and the Financial Figures for both companies prior to the deal:**

Merger Model - Illustrative Mechanics Between a Buyer and Seller
($ in Millions, Except Per Share Amounts in Dollars as Stated)

Transaction Assumptions - Year 1 of Illustrative M&A Deal

Company A acquires Company B. Please assume the following figures:

Company A Financial Figures:	
Current Share Price:	$ 10.00
Diluted Shares (Millions):	80.000
Pre-Transaction Equity Value:	$ 800.0
Pre-Tax Income:	$ 120.0
Tax Rate:	35.0%
Net Income:	$ 78.0
Premium Paid for Company B:	30.0%
Transaction Value:	$ 624.0
% Cash:	33.3%
% Debt:	33.3%
% Stock:	33.3%

Company B Financial Figures:	
Current Share Price:	$ 4.00
Diluted Shares:	120.000
Pre-Transaction Equity Value:	$ 480.0
Pre-Tax Income:	$ 60.0
Tax Rate:	35.0%
Net Income:	$ 39.0
Pre-Tax Synergies:	$ -

	Amount:	Pre-Tax Cost:
Cash Used:	$ 208.0	3.0%
Debt Issued:	208.0	7.0%
Company A Shares Issued (Millions):	20.800	

Based on these assumptions and the financial information for both companies, calculate the Weighted Average Cost of Acquisition for Company A and determine whether the deal will be accretive or dilutive at the 30% premium shown above.

a. Weighted Cost of Acquisition = 6.6%; the deal should be accretive.

b. Weighted Cost of Acquisition = 6.6%; the deal should be dilutive.

c. Weighted Cost of Acquisition = 5.4%; the deal should be dilutive.

d. Weighted Cost of Acquisition = 5.4%; the deal should be accretive.

4. **The previous question references a well-known "rule" for determining whether an acquisition will be accretive or dilutive to EPS (compare the buyer's weighted average cost of acquisition to the seller's yield at the purchase price).**

   While this can be a useful rule of thumb, it doesn't always work in real life.

   Which of the following represent <u>problems</u> with this rule of thumb for determining EPS accretion / dilution?

   a. It doesn't work if the tax rates of the buyer and seller are different.

   b. Acquisition effects such as asset write-up depreciation & amortization, synergies, and integration costs may "break" the rule.

   c. The buyer's share price will almost always change between the acquisition announcement and deal close, so the math will no longer hold up.

   d. If the acquisition closes midway through a fiscal year, the meaning of "Year 1" will be different and the buyer and seller yields will also be different, so you may get a different result.

   e. All of the above.

5. **Which of the following represents what a buyer <u>actually</u> pays for a seller in an M&A deal?**

   a. The Purchase Equity Value.

   b. The Purchase Enterprise Value.

   c. It depends on whether or not debt is refinanced in the deal.

   d. Neither the Purchase Equity Value nor the Purchase Enterprise Value, exactly.

6. **Consider a buyer and seller with the following financial profiles:**

- **Buyer EBITDA** = $500 million
- **Buyer Net Income** = $260 million
- **Buyer Equity Value** = $6.5 billion
- **Buyer Enterprise Value** = $7.5 billion
- **Buyer Cash** = $500 million
- **Buyer Debt** = $1.5 billion
- **Buyer Cost of Debt** = 7.0%
- **Buyer Tax Rate** = 40.0%

- **Seller EBITDA** = $200 million
- **Seller Net Income** = $100 million
- **Seller Equity Value** = $2.0 billion
- **Seller Enterprise Value** = $2.1 billion
- **Seller Cash** = $50 million
- **Seller Debt** = $150 million

The buyer is planning to pay a 25% premium for the seller. You can assume that the seller's cash and debt balances remain as-is, i.e. the buyer does not refinance the seller's debt or "take" its cash. Assume there are no transaction fees.

The comparable public companies have a median Debt / EBITDA ratio of 5.0x.

Based on this information, what is the MOST likely form of consideration the buyer will pay for the seller?

a. $500 million of cash; $1,850 million of debt; $150 million of stock.

b. $400 million of cash; $1,850 million of debt; $250 million of stock.

c. $400 million of cash; $1,000 million of debt; $1,100 million of stock.

d. $400 million of cash; $850 million of debt; $1,250 million of stock.

7. **Consider the following Sources & Uses schedule in a merger model (the other details of this particular M&A deal are unimportant):**

Sources & Uses of Funds

Sources:	
Cash Used:	$ -
Debt Issued:	1,827.3
Stock Issued:	-
Assume Target's Debt:	100.0
Estimated Cost Synergies:	75.0
Excess Cash Used:	211.7
Total Sources:	**$ 2,214.0**

Uses:	
Equity Purchase Price of Target:	$ 1,827.3
Refinance Acquirer's Debt:	97.5
Refinance Target's Debt:	56.1
Assume Target's Debt:	100.0
Integration Costs:	50.0
One-Time Transaction Fees:	28.3
Capitalized Financing Fees:	54.8
Total Uses:	**$ 2,214.0**

As you can see, there are some problems with this schedule. Which of the following statements represent <u>PROBLEMS</u> or <u>ERRORS</u> in this schedule?

a. Both the acquirer's debt and the target's debt are refinanced in this deal, but only the target's debt can be refinanced in an M&A transaction.

b. The target's debt is both assumed and refinanced, but you can't do both. Debt is either repaid or kept as-is on the Balance Sheet.

c. Cost Synergies should not be a Source of Funds because they do not reduce the amount the buyer pays for the seller immediately upon deal close.

d. Integration Costs should not be a Use of Funds because they do not increase the upfront cost of acquiring the seller.

e. Capitalized Transaction Fees should not be a Use of Funds because they are capitalized and added to the Balance Sheet, and are therefore not paid out upfront in cash.

8. **Consider the Purchase Price Allocation schedule shown below for an M&A deal:**

Purchase Price Allocation:

Goodwill Calculation:	
Equity Purchase Price:	$ 1,404.9
Less: Seller Book Value:	(561.7)
Plus: Write-Off of Existing Goodwill:	56.8
Total Allocable Purchase Premium:	
Less: Write-Up of PP&E:	
Less: Write-Up of Intangibles:	
Less: New Deferred Tax Assets:	
Less: Write-Down of Deferred Tax Liabilities:	(15.7)
Less: Write-Down of Deferred Rent:	(41.3)
Plus: New Deferred Tax Liability:	
Total Goodwill Created:	

Fixed Asset Write-Up:	
PP&E Write-Up %:	10.0%
PP&E Write-Up Amount:	$ 9.8
Depreciation Period (Years):	8

Intangible Asset Write-Up:	
Purchase Price to Allocate:	
% Allocated to Indefinite-Lived Intangibles:	60.0%
Indefinite-Lived Intangibles:	
% Allocated to Definite-Lived Intangibles:	5.0%
Intangibles Write-Up Amount:	
Amortization Period (Years):	5

New Deferred Tax Liability:

Based on the schedule above, please calculate the Goodwill created in this deal. Assume that the buyer's tax rate is 40.0%. All dollar figures above are in millions USD.

a. $486.1 million.

b. $270.1 million.

c. $1,008.2 million.

d. $513.1 million.

9. Consider the following Income Statement combination in a merger model:

Combined Income Statement	Units	Historical FY11	Historical FY12	Historical FY13	Projected FY14	Projected FY15	Projected FY16	Projected FY17	Projected FY18
Acquirer - Revenue:	$M				$ 2,553.8	$ 2,629.8	$ 2,681.3	$ 2,709.8	$ 2,768.1
Target - Revenue:	$M				1,061.8	1,110.5	1,166.5	1,200.7	1,252.9
Revenue Synergies:	$M				36.2	37.4	38.5	39.1	40.2
Total Revenue:	$M				**3,651.7**	**3,777.6**	**3,886.3**	**3,949.6**	**4,061.2**
Acquirer - Cost of Goods Sold:	$M				1,425.1	1,467.5	1,496.2	1,512.2	1,544.7
Target - Cost of Goods Sold:	$M				451.3	471.9	501.6	516.3	545.0
COGS Synergies:	$M				(4.8)	(15.0)	(25.5)	(30.0)	(30.0)
Total COGS:	$M				**1,871.5**	**1,924.5**	**1,972.3**	**1,998.5**	**2,059.7**
Gross Profit:	$M				**1,780.1**	**1,853.2**	**1,913.9**	**1,951.1**	**2,001.5**
Acquirer - SG&A Expense:	$M				737.8	753.0	764.4	772.5	782.3
Target - SG&A Expense:	$M				428.2	447.9	469.3	483.1	500.4
Acquirer - Rental Expense:	$M				177.1	179.6	188.2	190.2	198.6
Target - Rental Expense:	$M				78.6	82.1	87.3	89.9	92.1
Goodwill Impairment Charge:	$M				-	-	-	-	-
Asset Impairment Charges:	$M				-	-	-	-	-
OpEx Synergies:	$M				(11.8)	(37.0)	(62.9)	(74.0)	(74.0)
Amortization of New Intangibles:	$M				111.0	111.0	111.0	111.0	111.0
Depreciation from PP&E Write-Up:	$M				1.9	1.9	1.9	1.9	1.9
Operating Income:	$M				**257.5**	**314.8**	**354.8**	**376.7**	**389.3**
Acquirer - Net Interest Inc. / (Expense):	$M				(1.5)	(1.5)	(1.5)	(1.5)	(1.5)
Target - Net Interest Inc. / (Expense):	$M				0.5	0.5	0.5	0.5	0.5
Foregone Interest on Cash:	$M				(1.1)	(1.1)	(1.1)	(1.1)	(1.1)
Interest Paid on New Debt Issued:	$M				(98.4)	(98.4)	(98.4)	(98.4)	(98.4)
Amortization of Financing Fees:	$M				(11.0)	(11.0)	(11.0)	(11.0)	(11.0)
Net Interest Income / (Expense):	$M				**(111.4)**	**(111.4)**	**(111.4)**	**(111.4)**	**(111.4)**
Pre-Tax Income:	$M				**146.1**	**203.4**	**243.4**	**265.3**	**277.9**
Income Tax Provision:	$M				49.7	69.1	82.8	90.2	94.5
Net Income:	$M				**96.4**	**134.2**	**160.6**	**175.1**	**183.4**
Net (Income) Loss Attrib. to NCI:	$M				(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
Net Income to Common:	$M				**$ 96.2**	**$ 134.0**	**$ 160.4**	**$ 174.9**	**$ 183.2**
Acquirer - Avg. Dil. Shares:	M Shares				48.504	48.504	48.504	48.504	48.504
Shares Issued in Transaction:	M Shares				0.000	0.000	0.000	0.000	0.000
Total Diluted Shares:	M Shares				**48.504**	**48.504**	**48.504**	**48.504**	**48.504**
Acquirer - Standalone EPS:	$ / Share				$ 2.88	$ 3.10	$ 3.14	$ 3.17	$ 3.28
Earnings Per Share (EPS):	$ / Share				**$ 1.98**	**$ 2.76**	**$ 3.31**	**$ 3.61**	**$ 3.78**
Accretion / (Dilution) - $:	$ / Share				$ (0.90)	$ (0.34)	$ 0.17	$ 0.43	$ 0.50
Accretion / (Dilution) - %:	%				(31.2%)	(10.9%)	5.4%	13.7%	15.3%

Assume that $500.0 million of indefinite-lived intangibles and $54.8 million of definite-lived intangibles with an amortization period of 5 years are created in the deal. The PP&E write-up is $14.9 million with a useful life of 8 years.

Which of the following answer choices represent possible PROBLEMS in this schedule?

a. There are no COGS or Operating Expenses associated with the revenue synergies.

b. It seems like the revenue synergies are very high, given the combined company's revenue and the speculative nature of revenue synergies.

c. It seems like the Amortization of Intangibles is far too high, and might not be calculated correctly based on the information above.

d. The interest paid on new debt issued stays the same each year, even though debt principal is presumably being repaid.

e. The Amortization of Financing Fees stays the same each year, even though financing fees are normally not amortized on a straight-line basis.

10. **Which of the following is a VALID approach for estimating the expense synergies in an M&A deal?**

a. Look at lists of employees by department, see which roles might be consolidated or cut, and estimate the amount saved by all consolidated or cut roles across all departments.

b. Look for locations where the two companies both have stores or offices, calculate how much space is actually required, and estimate the rental savings from moving into one building instead.

c. Determine which IT systems and infrastructure can be consolidated or replaced, and the savings in staff costs, consulting fees, and software license / maintenance / subscription fees that would come from this.

d. For inventory-dependent companies, speak with suppliers and assess what discounts are available for bulk purchases, and then assume a reduced COGS based on this.

e. All of the above.

11. Consider the debt pay-down schedule for the combined company after an M&A deal closes, as well as the leverage ratios for comparable public companies, also shown below:

Debt Paydown Schedule:	Units	Projected FY14	FY15	FY16	FY17	FY18
Cash Flow from Operations:	$M	**290.2**	**330.1**	**370.2**	**410.9**	**411.4**
Capital Expenditures:	$M	(123.7)	(133.1)	(148.9)	(157.3)	(173.3)
Dividends:	$M	(42.7)	(45.9)	(46.4)	(46.9)	(48.5)
Integration Costs:	$M	(33.3)	(66.7)	-	-	-
Existing Debt Principal Repayments:	$M	-	-	-	-	-
Cash Flow Avail. for Debt Repaymer	$M	**90.4**	**84.5**	**174.9**	**206.7**	**189.7**
Beginning Transaction Debt Balance:	$M	1,827.3	1,736.9	1,652.4	1,477.5	1,270.8
Additional Borrowing / (Paydown):	$M	(90.4)	(84.5)	(174.9)	(206.7)	(189.7)
Ending Transaction Debt Balance:	$M	**1,736.9**	**1,652.4**	**1,477.5**	**1,270.8**	**1,081.1**
Beginning Existing Debt Balance:	$M	-	-	-	-	-
Additional Borrowing / (Paydown):	$M	-	-	-	-	-
Ending Existing Debt Balance:	$M	**-**	**-**	**-**	**-**	**-**
Total Debt Balance:	$M	**1,736.9**	**1,652.4**	**1,477.5**	**1,270.8**	**1,081.1**
Total Cash Balance:	$M	**202.4**	**202.4**	**202.4**	**202.4**	**202.4**
Total Debt / EBITDA:	x	*3.6 x*	*3.0 x*	*2.5 x*	*2.1 x*	*1.7 x*
Total Debt / EBITDAR:	x	*2.4 x*	*2.1 x*	*1.7 x*	*1.4 x*	*1.2 x*
Net Debt / EBITDA:	x	*3.2 x*	*2.7 x*	*2.2 x*	*1.8 x*	*1.4 x*
Net Debt / EBITDAR:	x	*2.1 x*	*1.8 x*	*1.5 x*	*1.2 x*	*1.0 x*
EBITDA / Net Interest Expense:	x	*4.4 x*	*5.2 x*	*5.8 x*	*6.7 x*	*7.9 x*
EBITDAR / Net Interest Expense:	x	*6.7 x*	*7.7 x*	*8.6 x*	*9.8 x*	*11.5 x*
Total Debt / Equity:	x	*1.8 x*	*1.5 x*	*1.2 x*	*0.9 x*	*0.7 x*
Total Debt / Capital:	%	*64.5%*	*60.2%*	*54.1%*	*47.0%*	*39.9%*
Net Debt / Equity:	x	*1.6 x*	*1.3 x*	*1.0 x*	*0.7 x*	*0.5 x*
Net Debt / Net Capital:	%	*61.6%*	*57.1%*	*50.4%*	*42.7%*	*35.0%*

Figure 5 Highly Leveraged Specialty Retailers

Company	Debt-to-EBITDA
David's Bridal	6.5x
Jo-Ann Stores	5.0x
Hot Topic	4.5x
Burlington	4.6x
Men's Wearhouse	3.0x

Based on the information above, which of the following conclusions might you draw about the debt used in this M&A deal?

a. You can't draw any conclusions since our Total Debt figure does not appear to be lease-adjusted (i.e., we are not capitalizing the lease expense and adding it to Total Debt).

b. Although the leverage ratios are in an acceptable range, the coverage ratios are too low because lenders generally want EBITDA / Net Interest to exceed 8x.

c. The buyer could almost certainly use more debt to fund the deal, given the relatively quick de-leveraging and the healthy coverage and leverage ratios.

d. Although the coverage and leverage ratios are acceptable, the combined company's Debt / Equity and Debt / Total Capital ratios are too high, so using more debt would not be acceptable.

12. **Suppose that a consumer retail acquirer completes an acquisition, and that it uses debt to fund the majority of the acquisition price.**

    In the year after the deal closes, however, the seller's financial performance deteriorates and the buyer feels its leverage and coverage ratios are too high.

    Which of the following strategies could the buyer pursue in the post-acquisition period to repay debt more quickly, <u>without</u> making the deal more dilutive to its EPS?

    a. Reduce dividends.

    b. Change the treatment of Integration Costs and expense them on the Income Statement rather than recognizing them only on the Cash Flow Statement.

    c. Issue additional stock to repay debt.

    d. Reduce CapEx spending.

    e. Sell some of its stores and use the proceeds to repay debt.

13. **Consider the sensitivity table shown below for the Year 1 Pro-Forma EPS accretion / dilution and the premium paid vs. % debt used, and the second table for the weighted average interest rate on debt and the same Year 1 accretion / dilution:**

Sensitivity - Year 1 Pro-Forma EPS Accretion / (Dilution) - Purchase Price per Share vs. % Debt Used (Remainder Funded with Stock):

			% Debt Used:								
			60.0%	65.0%	70.0%	75.0%	80.0%	85.0%	90.0%	95.0%	100.0%
Premium Paid and Per Share Purchase Price:	$ 56.24	35.0%	$ 0.22	$ 0.25	$ 0.28	$ 0.31	$ 0.35	$ 0.38	$ 0.42	$ 0.46	$ 0.50
	58.32	40.0%	0.18	0.21	0.24	0.27	0.30	0.34	0.37	0.41	0.46
	60.41	45.0%	0.14	0.16	0.19	0.23	0.26	0.29	0.33	0.37	0.41
	62.49	50.0%	0.09	0.12	0.15	0.18	0.22	0.25	0.29	0.33	0.37
	65.00	56.0%	0.05	0.07	0.10	0.13	0.17	0.20	0.24	0.28	0.32
	66.66	60.0%	0.01	0.04	0.07	0.10	0.13	0.17	0.20	0.24	0.28
	68.74	65.0%	(0.03)	0.00	0.03	0.06	0.09	0.12	0.16	0.20	0.24
	70.82	70.0%	(0.07)	(0.04)	(0.01)	0.02	0.05	0.08	0.12	0.16	0.20
	72.91	75.0%	(0.10)	(0.08)	(0.05)	(0.02)	0.01	0.04	0.08	0.11	0.16

Sensitivity - Year 1 Pro-Forma EPS Accretion / (Dilution) - Purchase Price per Share vs. Interest Rate on Debt (100% Debt Deal):

			Weighted Average Debt Interest Rate:								
			3.0%	3.5%	4.0%	4.5%	5.0%	5.4%	6.0%	6.5%	7.0%
Premium Paid and Per Share Purchase Price:	$ 56.24	35.0%	$ 1.01	$ 0.90	$ 0.80	$ 0.69	$ 0.58	$ 0.50	$ 0.37	$ 0.26	$ 0.15
	58.32	40.0%	0.99	0.88	0.76	0.65	0.54	0.46	0.32	0.21	0.10
	60.41	45.0%	0.96	0.85	0.73	0.62	0.50	0.41	0.27	0.15	0.04
	62.49	50.0%	0.94	0.82	0.70	0.58	0.46	0.37	0.22	0.10	(0.02)
	65.00	56.0%	0.91	0.79	0.66	0.54	0.41	0.32	0.16	0.04	(0.08)
	66.66	60.0%	0.89	0.76	0.64	0.51	0.38	0.28	0.13	(0.00)	(0.13)
	68.74	65.0%	0.87	0.74	0.60	0.47	0.34	0.24	0.08	(0.05)	(0.18)
	70.82	70.0%	0.84	0.71	0.57	0.44	0.30	0.20	0.03	(0.10)	(0.24)
	72.91	75.0%	0.82	0.68	0.54	0.40	0.26	0.16	(0.02)	(0.16)	(0.30)

The "base case" assumptions are shown in the light blue row and column in each table above.

Which of the following conclusions can you draw about the deal based on these tables?

a. If the buyer is aiming for a deal that's neutral to EPS, it could afford to pay, perhaps, $5.00 – $10.00 per share more than its current offer price.

b. An interest rate increase of even 1-2% represents a significant risk to EPS neutrality.

c. The buyer should use more debt to fund the deal. Even with higher interest rates, it's still cheaper to issue debt than stock, and more debt always increases EPS.

d. The purchase consideration does not make sense because debt and stock are both more expensive than cash, so the buyer should use more cash to fund the deal rather than relying on debt and stock.

14. Which of the following represent the main DIFFERENCES when analyzing a public company's acquisition of a <u>private company</u>, compared to an acquisition of a public company?

a. It's tougher to find the information since private companies disclose very little and rarely have filings or annual reports.

b. You base the purchase price on a lump-sum value or a multiple of EBITDA, EBIT, or other metrics, rather than assuming a share price premium.

c. The purchase price is almost always closer to Enterprise Value for private company acquisitions because of the answer choice above.

d. You calculate the weighted cost of acquisition for the buyer differently because stock cannot be used to fund the purchase of a private company.

e. Earn-outs are very common because buyers want to limit the upfront purchase consideration if there's disagreement on the seller's value or expected future performance.

f. You cannot apply all three valuation methodologies (public comps, precedent transactions, and the DCF) when valuing a private seller because it is not publicly traded, so comparable public companies do not make sense.

15. **Suppose that you are advising a public company on its acquisition of a private seller. Your client prefers an earn-out structure for the deal, with 50% of consideration paid upfront in cash and 50% paid in 2-3 years depending on the seller's financial performance.**

    Your client argues for this structure because an earn-out will not impact its EPS at allsince the earn-out payment only shows up on the Cash Flow Statement. Therefore, investors are less likely to penalize the company for such a deal.

    What would you tell your client in response to this line of reasoning?

    a. While the client's point is true, they should also be aware that earn-out deals typically require more than 50% upfront consideration to complete.

    b. The client's point is completely true, and if they are concerned about EPS accretion / dilution, an earn-out structure is the best option.

    c. The client's reasoning is incorrect because there will be a new Income Statement line item to reflect this new earn-out-related liability.

    d. While the client's point may be true, they should also be aware that changes in the value of the earn-out liability on the Balance Sheet will show up on the Income Statement, so there could easily be an EPS impact.

16. **Consider the Excel screenshot shown below, which details an all-stock M&A deal between Mormont Furs (MF) and Faros Cows (FC) based on an exchange ratio rather than a fixed offer price or a share price premium:**

M&A Case Study Exercise #2 - Accretion / (Dilution) Calculation in a Stock Exchange Deal
($ in Millions Except for Share Price and Per Share Data)

Mormont Furs (MF):		**Faros Cows (FC):**	
Market Cap:	$ 4,000.0	Market Cap:	$ 1,200.0
Shares (Millions):	80.000	Shares (Millions):	30.000
Total Assets:	3,500.0	Total Assets:	900.0
Total Liabilities:	3,000.0	Total Liabilities:	500.0
Share Price:	$ 50.00	Share Price:	$ 40.00
Net Income:	$ 400.0	Net Income:	$ 100.0
Earnings per Share:	$ 5.00	Earnings per Share:	$ 3.33
Tax Rate:	40.0%	Tax Rate:	40.0%

Purchase Consideration:	
Exchange Ratio:	1.200
MF Shares Issued to FC Investors:	
Purchase Price:	
Book Value of Faros Cows (FC):	
Purchase Premium:	
Amortization Period (Years):	20
Annual Amortization:	

Based on the numbers shown above, please calculate the EPS accretion / dilution **<u>percentage</u>**.

Assume that the purchase premium is allocated 100% to definite-lived intangibles (i.e., **NO** Goodwill or other assets or liabilities are created).

a. It's 26% dilutive.

b. It's 21% dilutive.

c. It's 10% dilutive.

d. It's 17% dilutive.

17. **Consider the scenario shown in the screenshot below for Company A and Company B, where Company A acquires Company B for no share price premium, using 50% debt and 50% stock, with an 8.3% interest rate on the debt:**

M&A Case Study Exercise #3 - How the Multiples Change After an Acquisition
($ in Millions Except for Share Price and Per Share Data)

Company A:	
Enterprise Value:	$ 250.0
Market Cap:	$ 200.0
EBITDA:	$ 20.0
Net Income:	$ 8.0
Tax Rate:	40.0%
EV / EBITDA:	12.5 x
P / E:	25.0 x

Company B:	
Enterprise Value:	$ 100.0
Market Cap:	$ 80.0
EBITDA:	$ 10.0
Net Income:	$ 4.0
Tax Rate:	40.0%
EV / EBITDA:	10.0 x
P / E:	20.0 x

Purchase Consideration:	
Price Paid for Company B:	$ 80.0
% Cash:	0.0%
% Debt:	50.0%
% Stock:	50.0%
Interest Rate on Debt:	8.3%
Combined Enterprise Value:	
Combined Equity Value:	
Combined EBITDA:	
Combined Net Income:	
Combined EV / EBITDA:	
Combined P / E:	

Company A does not refinance Company B's debt, nor does it do anything with Company B's cash. Assume there are also no transaction fees.

Based on this information, what are the combined company's EV / EBITDA and P / E multiples?

a. Combined EV / EBITDA = 11.7x; Combined P / E = 24.0x.

b. Combined EV / EBITDA = 11.7x; Combined P / E = 27.7x.

c. Combined EV / EBITDA = 11.7x; Combined P / E = 28.0x.

d. Combined EV / EBITDA = 13.0x; Combined P / E = 24.0x.