Financial Modeling – Certification Quiz Questions

Module 4 – 60-Minute and 2-Hour 3-Statement Modeling Case Studies

1. Consider the CapEx and Depreciation schedule shown below for the 3-statement projection model of Toro:

CapEx and Depreciation:					**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Capital Expenditures:	*$ M*	50.7	58.3	90.1	85.0	80.8	78.3	73.2	69.3
% Change in Revenue:	%		51.6%	79.4%	54.5%	53.0%	52.0%	51.0%	50.0%
Depreciation % - Starting Net PP&E:	%				20.0%	17.5%	15.0%	12.5%	10.0%
Depreciation % - New CapEx:	%				10.0%	10.0%	10.0%	10.0%	10.0%
Depreciation - Starting Balance:	*$ M*				54.3	47.5	40.7	33.9	27.1
Depreciation - Year 1 Additions:	*$ M*				8.5	8.5	8.5	8.5	8.5
Depreciation - Year 2 Additions:	*$ M*					8.1	8.1	8.1	8.1
Depreciation - Year 3 Additions:	*$ M*						7.8	7.8	7.8
Depreciation - Year 4 Additions:	*$ M*							7.3	7.3
Depreciation - Year 5 Additions:	*$ M*								6.9
Total Depreciation:	*$ M*				**62.8**	**64.1**	**65.1**	**65.7**	**65.8**

You believe these assumptions are reasonable, but you want to do a "sanity check" to ensure that they are appropriate for a mature company with mid-single-digit revenue growth rates. Which of the following metrics should you add to assess this in the most DIRECT and EFFICIENT way possible?

a. Add Depreciation as a % of the Change in Revenue.

b. Add Cash Flow from Operations and Free Cash Flow.

c. Add Return on Invested Capital (ROIC) and the company's Discount Rate each year.

d. Add CapEx as a % of Revenue and Depreciation as a % of Revenue.

2. Consider the Subscription Revenue (SaaS) projections for Atlassian, shown in the screenshot below:

Revenue Drivers:	Units:	Historical FY15	FY16	FY17	FY18	Projected FY19	FY20	FY21	FY22	FY23
Subscriptions:										
Subscription Revenue Billed & Recognized:	$ M		$ 111.7	$ 182.1	$ 303.2	$ 506.0	$ 775.2	$ 1,112.3	$ 1,620.2	$ 2,209.5
Subscription Revenue Deferred:	$ M	35.0	60.0	100.0	160.0	260.7	381.8	523.4	727.9	946.9
Subscription Billings:	$ M		**171.7**	**282.1**	**463.2**	**766.7**	**1,157.1**	**1,635.7**	**2,348.2**	**3,156.4**
Prev. Subscription DR Recognized as Revenue:	$ M		35.0	60.0	100.0	160.0	260.7	381.8	523.4	727.9
Subscription Revenue Billed & Recognized:	$ M		111.7	182.1	303.2	506.0	775.2	1,112.3	1,620.2	2,209.5
Subscription Revenue:	$ M		**146.7**	**242.1**	**403.2**	**666.0**	**1,035.9**	**1,494.1**	**2,143.7**	**2,937.4**
Subscription Billings - Customer Renewals:	$ M			171.2	268.0	473.9	732.5	1,041.4	1,545.8	2,113.3
Renewal Rate:	%		96.0%	95.0%	95.0%	93.0%	91.0%	90.0%	90.0%	90.0%
Average Price Increase for Subscribers:	%		0.0%	5.0%	0.0%	10.0%	5.0%	0.0%	5.0%	0.0%
Subscription Billings - New Customers:	$ M			110.9	195.2	292.8	424.5	594.4	802.4	1,043.1
Growth Rate in New Customer Billings:	%				76.0%	50.0%	45.0%	40.0%	35.0%	30.0%
Total Subscription Billings:	$ M			282.1	463.2	766.7	1,157.1	1,635.7	2,348.2	3,156.4
% Subscription Billings Recognized as Revenue:	%		65.0%	64.6%	65.5%	66.0%	67.0%	68.0%	69.0%	70.0%

Which of the following statements about these projections is NOT true?

a. Since Billings represent cash collections, subscriptions are growing rapidly, and a portion of the cash collected is not recognized as Revenue in the given year, Billings always exceed Revenue.

b. If Atlassian took more time (e.g., over 1 year) to recognize cash collected as Revenue, the difference between Billings and Revenue would increase.

c. Based on these numbers, the Change in Deferred Revenue should be a positive, growing number on the Cash Flow Statement each year.

d. With a much lower Renewal Rate, such as 50%, Revenue would start to exceed Billings in the later years because the company would have far less cash from the previous year to recognize as Revenue in the current year.

3. Consider Atlassian's plans for add-on acquisitions of high-growth software companies, as shown in the schedule below:

Acquisition Projections:		FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23
Acquisitions, Net of Cash Acquired:	$ M	11.5	-	381.1	-	295.0	700.0	725.0	750.0	775.0
% Allocated to Net Deferred Tax Asset:	%				(5.0%)					
% Allocated to Goodwill:	%				65.0%					
% Allocated to Other Intangible Assets:	%				30.0%					
% Allocated to Other Non-Current Assets:	%				10.0%					
Amortization % - Starting Intangible Balance:	%					50.0%	50.0%	0.0%	0.0%	0.0%
Amortization % - Newly Acquired Intangibles:	%					33.3%	33.3%	33.3%	0.0%	0.0%
Amortization - Starting Balance:	$ M					31.8	31.8	-	-	-
Amortization - Year 1 Additions:	$ M					29.5	29.5	29.5	-	-
Amortization - Year 2 Additions:	$ M						70.0	70.0	70.0	-
Amortization - Year 3 Additions:	$ M							72.5	72.5	72.5
Amortization - Year 4 Additions:	$ M								75.0	75.0
Amortization - Year 5 Additions:	$ M									77.5
Total Amortization:	$ M	**6.5**	**7.5**	**29.9**	**57.3**	**61.3**	**131.3**	**172.0**	**217.5**	**225.0**
Actual or Expected Revenue Multiple:	x			38.1 x		25.0 x	20.0 x	20.0 x	20.0 x	20.0 x
Expected Revenue Growth Rate:	%					100.0%	90.0%	80.0%	70.0%	60.0%
Expected EBIT Margins:	%					10.0%	12.5%	15.0%	17.5%	20.0%
Revenue from Acquisitions - Year 1:	$ M					11.8	23.6	44.8	80.7	137.2
Revenue from Acquisitions - Year 2:	$ M						35.0	70.0	133.0	239.4
Revenue from Acquisitions - Year 3:	$ M							36.3	72.5	137.8
Revenue from Acquisitions - Year 4:	$ M								37.5	75.0
Revenue from Acquisitions - Year 5:	$ M									38.8
Total Revenue from Acquisitions:	$ M					**11.8**	**58.6**	**151.1**	**323.7**	**628.1**
EBIT from Acquisitions - Year 1:	$ M					1.2	3.0	6.7	14.1	27.4
EBIT from Acquisitions - Year 2:	$ M						3.5	8.8	20.0	41.9
EBIT from Acquisitions - Year 3:	$ M							3.6	9.1	20.7
EBIT from Acquisitions - Year 4:	$ M								3.8	9.4
EBIT from Acquisitions - Year 5:	$ M									3.9
Total EBIT from Acquisitions:	$ M					**1.2**	**6.5**	**19.1**	**46.9**	**103.2**

Without looking at anything else in the model, how can you tell at a glance that these add-on acquisitions are unlikely to make a big impact on Atlassian’s growth and the potential returns it could generate for investors?

a. The EBIT margins are too low – if they were closer to 30-40%, then these add-on acquisitions would make far more of an impact.

b. It’s paying extremely high revenue multiples for the companies, and 5 years isn’t enough time to see the full benefits of these companies’ high growth rates.

c. The company is not spending enough on the acquisitions; spending several billion per year rather than $700 – $800 million would make a bigger difference.

d. The high percentage allocated to Other Intangible Assets means that the Amortization of Intangibles will wipe out much of the benefit of these deals.