Module 12 – Financial Accounting for MBAs, 7th Edition by Easton, Wild, Halsey & McAnally

Practice Quiz Solutions

1. Assume Abercrombie & Fitch reports the following fiscal year income statement.

Income Statement ($ thousands)	**2016**
Sales	$2,784,711
Cost of goods sold	933,295
Gross profit	1,851,416
Stores and distribution expense	1,000,755
Marketing, general and administrative expense	313,457
Other operating income, net	(5,534)
Operating income	542,738
Interest income, net	(6,674)
Income before income taxes	549,412
Provision for income taxes	215,426
Net income	$ 333,986

Forecast Abercrombie & Fitch's 2017 income statement assuming the following income statement relations ($ 000s); cost of goods sold can be inferred as sales minus gross profit, and assume no change for all other accounts not listed below.

Net sales growth …………………………………………………………	37.8%
Gross profit margin …………………………………………………………	66.5%
Stores and distribution expenses/Net sales ……………………………	35.9%
Marketing, general and administrative expense/Net sales ……………	11.3%
Other operating income, net/Net sales …………………………………	-0.2%
Provision for income taxes/Income before income taxes ………………	39.2%
Interest income, net ………………………………………………………	No change

What is the forecasted net income for 2017?

a. $3,837,332,000
b. $333,986,000
c. $126,246,000
d. $459,012,000

Answer: d

($ 000s)						2017
Net sales	(	$2,784,711	x	1.378	)	$ 3,837,332
Cost of goods sold	(	$3,837,332	x	33.5%	)	1,285,506
Gross profit	(	$3,837,332	x	66.5%	)	2,551,826
Stores & distribution expense	(	$3,837,332	x	35.9%	)	1,377,602
Marketing, general and administrative expense	(	$3,837,332	x	11.3%	)	433,619
Other operating income, net	(	$3,837,332	x	-0.2%	)	(7,675)
Operating income						748,280
Interest income	(	no change			)	(6,674)
Income before income taxes	(	no change			)	754,954
Provision for income taxes	(	754,954	x	39.2%	)	295,942
Net income						$ 459,012

2. Assume Best Buy reports the following fiscal year income statement.

Income Statement ($ millions)	2016
Revenue	$30,848
Cost of goods sold	23,122
Gross profit	7,726
Selling, general and administrative expenses	6,082
Operating income	1,644
Net interest income	77
Earnings from continuing operations before income tax expense	1,721
Income tax expense	581
Net earnings	$ 1,140

Forecast Best Buy's fiscal year 2017 income statement assuming the following income statement relations; cost of goods sold can be inferred as sales minus gross profit, and assume no change for all other accounts not listed below.

Revenue growth	12.4%
Gross profit margin	25.0%
Selling, general and administrative expense / Revenue	19.7%
Income tax expense/Earnings from continuing operations before income tax	33.8%

What is the forecasted net earnings for fiscal year ended 2017?

a. $1,268 million
b. $1,140 million
c. $1,301 million
d. $1,377 million

Answer: a

($ millions)							2017
Revenue	(	$30,848	x	1.124	)	$	34,673
Cost of Goods Sold	(	$34,673	x	75.0%	)		26,005
Gross Profit	(	$34,673	x	25.0%	)		8,668
Selling, general and administrative expense	(	$34,673	x	19.7%	)		6,831
Operating income							1,838
Net Interest income	(	no change			)		(77)
Earnings from continuing operations before income tax							1,915
Income tax expense	(	1,915	x	33.8%	)		647
Net earnings						$	1,268

3. Assume that Harley-Davidson reports 2017 net operating working capital of $1,226 million and 2017 long-term operating assets of $812 million.

Forecast Harley-Davidson's 2018 net operating working capital and 2018 long-term operating assets. Assume forecasted revenues of $6,051 million, net operating working capital turnover of 4.63 times, and long-term operating asset turnover of 6.99 times. (Both turnover rates are computed here using year-end balances. Finance receivables and related debt are considered operating under the assumption that they are an integral part of Harley's operating activities).

a. $3,019 million net operating working capital; $942 million long-term operating assets
b. $3,667 million net operating working capital; $1,014 million long-term operating assets
c. $2,173 million net operating working capital; $792 million long-term operating assets
d. $1,307 million net operating working capital; $866 million long-term operating assets

Answer: d

Recall that:
Net operating working capital turnover = Sales / Net operating working capital
Long-term operating asset turnover = Sales / Long-term operating assets

Forecasted net operating working capital	Forecasted long-term operating assets
$6,051 million/ 4.63 = $1,307 million	$6,051 million / 6.99 = $866 million

4. Assume that Nike reports 2017 net operating working capital of $2,603 million and 2017 long-term operating assets of $1,980 million.

   Forecast Nike's 2018 net operating working capital and 2018 long-term operating assets. Assume forecasted sales of $15,389 million, net operating working capital turnover of 5.28 times, and long-term operating asset turnover of 6.94 times. (Both turnover rates are computed here using year-end balances.)

   a. $4,747 million net operating working capital; $2,417 million long-term operating assets
   b. $2,915 million net operating working capital; $2,217 million long-term operating assets
   c. $4,219 million net operating working capital; $2,198 million long-term operating assets
   d. $3,876 million net operating working capital; $1,982 million long-term operating assets

   Answer: b

   Recall that:
   Net operating working capital turnover = Sales / Net operating working capital
   Net operating long-term asset turnover = Sales / Net operating long-term assets

   Forecasted net operating working capital = $15,389/5.28 = $2,915 million, Forecasted net long-term operating assets = $15,389/6.94 = $2,217 million.

5. Assume the following are the fiscal year income statement and balance sheet of Whole Foods Market, Inc.

Income Statement ($ thousands)	**2016**
Sales	$4,701,289
Cost of goods sold and occupancy costs	3,052,184
Gross profit	1,649,105
Direct store expenses	1,223,473
General and administrative expenses	158,864
Pre-opening and relocation costs	37,035
Operating income	229,733
Other income expense	
Interest expense	(2,223)
Investment and other income	9,623
Income before income taxes	237,133
Provision for income taxes	100,782
Net income	$ 136,351

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5. continued

Balance Sheet ($ thousands)	**2016**	**2015**
Assets		
Cash and cash equivalents	$ 308,524	$ 194,747
Restricted cash	36,922	26,790
Trade accounts receivable	66,682	64,972
Merchandise inventories	174,848	152,912
Prepaid expenses and other current assets	45,965	16,702
Deferred income taxes	39,588	29,974
Total current assets	672,529	486,097
Property, plant and equipment, net	1,054,605	873,397
Goodwill	112,476	112,186
Intangible assets, net	21,990	24,831
Deferred income taxes	22,452	4,193
Other assets	5,244	20,302
Total assets	$1,889,296	$1,521,006
Liabilities and Shareholders' equity		
Current portion of long-term debt	$ 5,932	$ 5,973
Trade accounts payable	103,348	90,751
Accrued payroll, bonus and other benefits	126,981	100,536
Dividends payable	17,208	9,361
Other current liabilities	164,914	128,329
Total current liabilities	418,383	334,950
Long-term debt, less current installments	12,932	164,770
Deferred rent liabilities	91,775	70,067
Other long-term liabilities	530	1,581
Total liabilities	523,620	571,368
Shareholders' equity		
Common stock	874,972	535,107
Accumulated other comprehensive income	4,405	2,053
Retained earnings	486,299	412,478
Shareholders' equity	1,365,676	949,638
Total liabilities and shareholders' equity	$1,889,296	$1,521,006

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5. continued

Forecast Whole Food Market's 2017 income statement and year-end balance sheet using the following relations (cost of goods sold and occupancy costs can be inferred as sales minus gross profit; and assume no change for all other accounts not listed below). Cash balance is plug figure.

Sales growth ………	21.6%
Gross profit margin ………	35.1%
Direct store expenses ………	26.0%
General and administrative expenses ………	3.4%
Pre-opening and relocation costs ………	0.8%
Provision for income taxes/Income before income taxes ………	42.6%
Sales/Year-end trade accounts receivable ………	70.16
Cost of goods sold and occupancy costs/Year-end merchandise inventories ………	17.54
Sales/Year-end property and equipment, net ………	4.46
Cost of goods sold and occupancy costs/Year-end trade accounts payable ………	29.63
Sales/Year-end accrued payroll, bonus and other benefits due team members ………	37.02
Dividends/Net income ………	40.2%
Dividends/Dividends payable ………	3.22

What is the forecasted cash balance at fiscal 2017 year-end?

a. $ 214 million
b. $ 416 million
c. ($ 319) million
d. $1,217 million

Answer: a

($ millions)			2017
Sales	($4,701 x 1.216)	$	5,716
Cost of Goods Sold and occupancy costs	($5,716 x 64.9%)		3,710
Gross Profit	($5,716 x 35.1%)		2,006
Direct store expenses	($5,716 x 26.0%)		1,486
General and administrative exp.	($5,716 x 3.4%)		194
Pre-opening and relocation costs	($5,716 x 0.8%)		46
Operating income			280
Interest expense	no change		2
Investment and other income	no change		(10)
Income before tax			288
Provision for income taxes	($288 x 42.6%)		123
Net income		$	165

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5. Answer continued

($ millions)					2017
Cash and equivalents	computed*			$	214
Restricted cash	no change				37
Trade accounts receivable	($5,716	/	70.16)		81
Merchandise inventories	($3,710	/	17.54)		212
Prepaid expenses and other	no change				46
Total Current Assets					590
PPE (net)	($5,716	/	4.46)		1,282
Goodwill, other intangible assets, and other assets	no change				162
Total Assets				$	2,034
Current installments of long-term debt	no change			$	6
Trade accounts payable	($3,710	/	29.63)		125
Accrued payroll, bonus and benefits	($5,716	/	37.02)		154
Dividends payable	(($165 x 40.2%) / 3.22		)		21
Other current liabilities	no change				165
Total Current liabilities					471
Long-term debt	computed**				7
Deferred rent and other	no change				92
Total liabilities					570
Common Stock	no change				875
Accum. Other comp. income	no change				4
Retained earnings	computed***				585
Stockholders' Equity					1,464
Total Liabilities and Equity				$	2,034

* Total Liabilities and Equity - non-cash assets
** Beginning Long-term debt $13 - beginning Current installments of long-term debt $6
*** Beginning Retained earnings $486 + Net income $165 - Dividends $ 66 ($165 x 40.2%)

6. Assume the following are the fiscal year income statements and balance sheets of Abercrombie & Fitch.

Income Statement ($ thousands)	**2016**
Sales	$2,784,711
Cost of goods sold	933,295
Gross profit	1,851,416
Stores and distribution expense	1,000,755
Marketing, general and administrative expense	313,457
Other operating income, net	(5,534)
Operating income	542,738
Interest income, net	(6,674)
Income before income taxes	549,412
Provision for income taxes	215,426
Net income	$ 333,986

Balance Sheet ($ thousands)	**2016**	**2015**
Assets		
Cash and equivalents	$ 50,687	$ 338,735
Marketable securities	411,167	--
Receivables	41,855	37,760
Inventories	362,536	211,198
Deferred income taxes	29,654	39,090
Other current assets	51,185	44,001
Total current assets	947,084	670,784
Property and equipment, net	813,603	687,011
Other assets	29,031	28,996
Total assets	$1,789,718	$1,386,791
Liabilities and shareholders' equity		
Accounts payable	$ 86,572	$ 83,760
Outstanding checks	58,741	53,577
Accrued expenses	215,034	205,153
Deferred lease credits	31,727	31,135
Income taxes payable	99,480	55,587
Total current liabilities	491,554	429,212
Deferred income taxes	38,496	50,032
Deferred lease credits	191,225	177,923
Other liabilities	73,326	60,298
Total long-term liabilities	303,047	288,253

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Table continued

Balance Sheet—continued ($ thousands)	2016	2015
Shareholders' equity		
Common stock	1,033	1,033
Paid-in capital	161,678	140,251
Retained earnings	1,357,791	1,076,023
Accumulated other comprehensive	(796)	--
Deferred compensation	26,206	15,048
Treasury stock	(550,795)	(563,029)
Total shareholders' equity	995,117	669,326
Total liabilities and shareholders' equity	$1,789,718	$1,386,791

Forecast its fiscal year 2017 income statement, its 2017 fiscal year-end balance sheet, and fiscal year 2017 statement of cash flows using the following relations (cost of goods sold can be inferred as sales minus gross profit; assume no change for all other accounts not listed).

Net sales growth ……………………………………………..	37.8%
Gross profit margin………………………………………..	66.5%
Stores and distribution expense/Net sales……………………..	35.9%
Marketing, general and administrative expense/Net sales	11.3%
Other operating income, net/Net sales………………………….	-0.2%
Depreciation/Prior year property and equipment, net………….	18.1%
Provision for income taxes/Income before income taxes……..	39.2%
Interest income, net…………………………………………	no change
Net sales/Year-end receivable………………………………..	66.53
Cost of goods sold/Year-end inventories……………………….	2.57
Cost of goods sold/Year-end payable…………………………..	10.78
Net sales/Year-end property and equipment, net……………..	3.42
Net sales/Year-end accrued expenses…………………………	12.95
Income taxes payable/Provision for income taxes…………….	46.2%
Dividends……………………………………………………	$52,218

What is the forecasted 2017 net cash flow from operating activities?

a. $146,780,000
b. $455,686,000
c. $603,997,000
d. $ 52,218,000

Answer: c

Abercrombie & Fitch Forecasted Income Statement

($ 000s)			2017
Net sales	($2,784,711 × 1.378)		$ 3,837,332
Cost of goods sold	($3,837,332 x 33.5%)		1,285,506
Gross profit	($3,837,332 x 66.5%)		2,551,826
Stores & distribution expense	($3,837,332 x 35.9%)		1,377,602
Marketing, general and administrative expense	($3,837,332 x 11.3%)		433,619
Other operating income, net	($3,837,332 x -0.2%)		(7,675)
Operating income			748,280
Interest income	(no change)		(6,674)
Income before income taxes			754,954
Provision for income taxes	(754,954 x 39.2%)		295,942
Net income			$ 459,012

Abercrombie & Fitch Forecasted Balance Sheet

($ 000s)		2017
Cash and equivalents	(computed*)	$ 146,780
Marketable securities	(no change)	411,167
Receivables	($3,837,332 / 66.53)	57,678
Inventories	($1,285,506 / 2.57)	500,197
Deferred income taxes	(no change)	29,654
Other current assets	(no change)	51,185
Total current assets		1,196,661
Property and equipment, net	($3,837,332 / 3.42)	1,122,027
Other assets	(no change)	29,031
Total assets		$ 2,347,719
Accounts payable	($1,285,506 / 10.78)	$ 119,249
Outstanding checks	(no change)	58,741
Accrued expenses	($3,837,332 / 12.95)	296,319
Deferred lease credits	(no change)	31,727
Income taxes payable	($295,942 x 46.2%)	136,725
Total current liabilities		642,761
Deferred income taxes	(no change)	38,496
Deferred lease credits	(no change)	191,225
Other liabilities	(no change)	73,326
Total liabilities		945,808
Common stock	(no change)	1,033
Paid-in capital	(no change)	161,678
Retained earnings	(computed**)	1,764,585
Accum. other comprehensive income	(no change)	(796)
Deferred compensation	(no change)	26,206
Treasury stock	(no change)	(550,795)
Stockholders' equity		1,401,911
Total liabilities and equity		$ 2,347,719

* Total assets $2,347,719 – Noncash assets $2,200,939 = Cash $146,780
** Beginning Retained earnings $1,357,791 + Net income $459,012 – Dividends $52,218

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6. Answer continued

Abercrombie & Fitch Statement of Cash Flows

($ thousands)						2017
Operating activities						
Net income	(from forecasted income statement)				$	459,012
Depreciation	($813,603	x	18.1%)			147,262
Receivables	($41,855	-	$57,678)			(15,823)
Inventories	($362,536	-	$500,197)			(137,661)
Accounts Payable	($119,249	-	$86,572)			32,677
Accrued Expenses	($296,319	-	$215,034)			81,285
Income taxes payable	($136,725	-	$99,480)			37,245
Net cash flow from operating activities						603,997
Investing activities						
Property and Equipment, net	(computed*		)			(455,686)
Net cash flow from investing activities						(455,686)
Financing activities						
Dividends						(52,218)
Net cash flows from financing activities						(52,218)
Net change in cash						96,093
Beginning cash						50,687
Ending cash					$	146,780

* Beginning PPE $813,603 - Ending PPE $1,122,027 - Depreciation $147,262

7. Assume the following are the fiscal year income statement and balance sheets of Best Buy, Co., Inc.

Income Statement ($ millions)	**2016**
Revenue	$30,848
Cost of goods sold	23,122
Gross profit	7,726
Selling, general and administrative expenses	6,082
Operating income	1,644
Net interest income	77
Earnings from continuing operations before income tax expense	1,721
Income tax expense	581
Net earnings	$ 1,140

Balance Sheet ($ millions)	**2016**	**2015**
Assets		
Cash and cash equivalents	$ 681	$ 354
Short-term investments	3,051	2,994
Receivables	506	375
Merchandise inventories	3,335	2,851
Other current assets	409	329
Total current assets	7,985	6,903
Property, plant and equipment, net	2,712	2,464
Goodwill	557	513
Tradename	44	40
Long-term investments	218	148
Other assets	348	226
Total assets	$11,864	$10,294
Liabilities and Shareholders' equity		
Accounts payable	3,234	2,824
Unredeemed gift card liabilities	469	410
Accrued compensation and related expenses	354	234
Accrued liabilities	878	844
Accrued income taxes	703	575
Current portion of long-term debt	418	72
Total current liabilities	6,056	4,959
Long-term liabilities	373	358
Long-term debt	178	528
Shareholders' equity		
Preferred stock	--	--
Common stock	49	49
Additional paid-in capital	643	936
Retained earnings	4,304	3,315
Accumulated other comprehensive income	261	149
Total shareholders' equity	5,257	4,449
Total liabilities and shareholders' equity	$11,864	$10,294

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Forecast Best Buy's fiscal year 2017 income statement, its 2017 fiscal year-end balance sheet, and its fiscal year 2017 statement of cash flows using the following relations (cost of goods sold can be inferred as revenue minus gross profit; and assume no change for all other accounts not listed below).

Revenue growth	12.4%
Gross profit margin	25.0%
Selling, general and administrative expenses/Revenue	19.7%
Depreciation (inc. in SG&A expense)/Prior year net property and equipment	18.5%
Income tax expense/Earnings from continuing operations before income taxes	33.8%
Revenues/Year-end receivables	60.96
Cost of goods sold/Year-end merchandise inventories	6.93
Cost of goods sold/Year-end accounts payable	7.15
Revenue/Year-end net property and equipment	11.38
Revenue/Year-end accrued compensation and related expenses and accrued liabilities	25.04
Accrued income taxes/Income tax expense	121.0%
Dividends/Net earnings	13.2%
Long-term debt in next fiscal year	$16

What is the forecasted 2017 net cash flow from investing activities?

a. $ 505 million
b. ($ 585) million
c. ($ 837) million
d. $1,928 million

Answer: c

Best Buy Income Statement

($ millions)							2017
Revenue	(	$30,848	x	1.124	)	$	34,673
Cost of Goods Sold	(	$34,673	x	75.0%	)		26,005
Gross Profit	(	$34,673	x	25.0%	)		8,668
Selling, general & administrative expense	(	$34,673	x	19.7%	)		6,831
Operating income							1,837
Net interest income	(	no change			)		77
Earnings before tax							1,914
Income tax expense	(	$1,914	x	33.8%	)		647
Net earnings						$	1,267

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7. Answer *continued*

Best Buy Balance Sheet

($ millions)								2017
Cash and equivalents	(	Computed *			)	$		1,186
Short-term investments	(	no change			)			3,051
Receivables	(	34,673	/	60.96	)			569
Merchandise inventories	(	26,005	/	6.93	)			3,753
Other current assets	(	no change			)			409
Total Current Assets								8,968
Net property and equipment	(	34,673	/	11.38	)			3,047
Goodwill	(	no change			)			557
Trade name	(	no change			)			44
Long-term investments	(	no change			)			218
Other assets	(	no change			)			348
Total Assets						$		13,182
Accounts Payable	(	26,005	/	7.15	)	$		3,637
Unredeemed gift card liabilities	(	no change			)			469
Accrued compensation and accrued liabilities	(	34,673	/	25.04	)			1,385
Accrued income taxes	(	647	x	121.0%	)			783
Current portion of long-term debt	(	Given			)			16
Total Current Liabilities								6,290
Long-term liabilities	(	no change			)			373
Long-term debt	(	prior year less current			)			162
Total liabilities								6,825
Common Stock	(	no change			)			49
Additional paid-in capital	(	no change			)			643
Retained earnings	(	computed	**		)			5,404
Accumulated other comprehensive income	(	no change			)			261
Stockholders' Equity								6,357
Total Liabilities and Equity						$		13,182

* Total assets less non-cash assets

** Beginning Retained earnings $4,304 + Net income $1,267 - Dividends $167

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7. Answer *continued*

Best Buy Statement of Cash Flows

($ millions)								2017
Net earnings	(	from forecasted income statement			)	$	1,267
Depreciation	(	2,712	x	18.5%	)		502
Receivables	(	506	-	569	)		(63)
Merchandise inventories	(	3,338	-	3,753	)		(415)
Accounts Payable	(	3,637	-	3,234	)		403
Accrued Expenses	(	1,385	-	1,232	)		153
Income taxes payable	(	783	-	703	)		80
Net cash flow from operating activities							1,927
PPE (net)	(	computed***			)		(837)
Net cash flow from investing activities							(837)
Long-term debt	(	prior year current portion			)		(418)
Dividends	(	1,267	x	13.2%	)		(167)
Net cash flows from financing activities							(585)
Net change in cash							505
Beginning cash							681
Ending cash						$	1,186

*** Beginning PPE $2,712 – Ending PPE $3,047 – Depreciation $502

8. Following are Cooper Company's sales, net operating profit after tax (NOPAT), and net operating assets (NOA) for its year ended December 31, 2017 ($ millions).

Sales ………………………………………………..	$38,826
Net operating profit after tax (NOPAT) ..…………	8,333
Net operating assets (NOA) ………………………	21,694

Forecast Cooper's NOPAT for years 2018 and 2019 using the following assumptions:

Sales growth per year	13.50%
Net operating profit margin (NOPM)	21.46%
Net operating asset turnover (NOAT), based on NOA at December 1, 2017	1.79

a. 2018: $ 9,457 million   2019: $10,734 million
b. 2018: $ 9,458 million   2019: $11,396 million
c. 2018: $10,121 million   2019: $12,293 million
d. 2018: $ 8,732 million   2019: $ 9,319 million

Answer: a

		Forecast Horizon	
$ millions	2017	2018 Est.	2019 Est.
Sales*	$38,826	$44,068 ($38,826 x 1.135)	$50,017 ($44,068 x 1.135)
NOPAT**	$ 8,333	$ 9,457 ($44,068 x 21.46%)	$10,734 ($50,017 x 21.46%)

* Sales = Prior year sales x (1+ Growth of 13.5%)
** NOPAT = Sales x NOPM (21.46%)

9. Following are Tribeca Inc.'s sales, net operating profit after tax (NOPAT), and net operating assets (NOA) for its fiscal year ended May 31, 2017 ($ millions).

Sales ……………………………………..……………..	$14,380
Net operating profit after tax (NOPAT) ..…………	3,333
Net operating assets (NOA) ………………………	13,301

Forecast Tribeca's NOA for fiscal years 2018 and 2019 using the following assumptions:

Sales growth per year ………………………..	21.90%
Net operating profit margin (NOPM) …………………………..…………………	23.18%
Net operating asset turnover (NOAT), based on NOA at May 31, 2017 ……	1.08

a. 2018: $24,001 million 2019: $26,532 million
b. 2018: $16,231 million 2019: $19,785 million
c. 2018: $17,529 million 2019: $21,368 million
d. 2018: $14,371 million 2019: $10,347 million

Answer: b

		Forecast Horizon	
$ millions	2017	2018 Est.	2019 Est.
Sales*	$14,380	$17,529 ($14,380 x 1.219)	$21,368 ($17,529 x 1.219)
NOA***	$13,301	$16,231 ($17,529 / 1.08)	$19,785 ($21,368 / 1.08)

* Sales = Prior year sales x (1+ Growth of 21.90%)
*** NOA = Sales / NOAT (1.08)