

Name: \_\_\_\_\_ Solution \_\_\_\_\_.

ID # \_\_\_\_\_

**ACCOUNTING 15.501/516  
FALL 2003  
MIDTERM I**

EXAM GUIDELINES

1. This exam contains 8 pages, in two parts. Please make sure your copy is not missing any pages.
2. The exam must be completed within 80 minutes.
3. The total number of points in this exam is also 80, so budget about 1 minute / point. Avoiding spending too much time on any one question.

<u>Question</u>	<u>Topic</u>	<u>Points</u>
I	Recording the effects of transactions: William's Merchandize Distribution	30
II	Accounts receivable, inventories, and cash flow: Abercrombie & Fitch	50

4. Please work the problems in a clear, readable manner and show all computations. We will not grade what we cannot read.
5. If you feel that assumptions are necessary to solve a problem, please state your assumption and why it was necessary.
6. Calculators may be used for computations on this exam.
7. Good luck.

**QUESTION I: TRANSACTIONS: WILLIAM'S MERCHANDIZE DISTRIBUTION (30 POINTS)**

William's Merchandize Distribution (WMD) is a wholesale grocery distributor. Using the Balance Sheet Equation worksheet provided below, record the effects of the transactions shown on page 6 (2 points each). Calculate the ending balances of each account when you are done recording the transactions (2 points). Compute net income for the year ended December 31, 2002 (2 points).

	Cash	Receivables	Inventories	Prepaid Rent	Property, at Cost, Less Accum. Depr.	Current Liabilities	Noncurrent Liabilities	Contributed Capital	Retained Earnings	R/E Explanation
1/1/2002 Balances	150,000	95,000	896,000	51,000	1,372,000	988,000	579,000	240,000	757,000	
1.			6,320,000			6,320,000				
2.		7,900,000							7,900,000	Revenue
3.	-108,000			108,000						
4.	-6,305,000					-6,305,000				
5.	none									
6.	7,820,000	-7,820,000								
7.	-67,000								-67,000	Interest exp.
8.	-42,000								-42,000	Dividends
9.			-6,287,000						-6,287,000	COGS
10.	-1,230,000								-1,230,000	Wages expense
11.						4,000			-4,000	Wages expense
12.				-105,000					-105,000	Rent expense
13.					-70,000				-70,000	Depr. expense
12/31/2002 Balances	218,000	175,000	929,000	54,000	1,302,000	1007,000	579,000	240,000	852,000	

**Net Income for the period ended December 31, 2002: 137,000**

**QUESTION II: ABERCROMBIE & FITCH (50 POINTS)**

Abercrombie & Fitch (A&F) is a large and growing retail chain of 597 stores in the U.S (adding 112 stores in the last year). The last two pages of this exam contain the balance sheets and income statements from A&F’s February 1, 2003 annual report to shareholders (with minor modifications).

**ACCOUNTS RECEIVABLE AND REVENUE RECOGNITION (15 POINTS)**

- As a retailer, A&F has only a minimal amount of accounts receivable, as shown on the balance sheets. Nevertheless, assume that the company wrote off \$1,160k in uncollectible receivables in the year ended February 1, 2003. Reconstruct plausible transactions to record these write-offs and the recognition of bad debt expense in the Balance Sheet Equation for the year ended February 1, 2003. (6 points)

	Cash	Accts Receivable	-ADA	Retained Earnings
Beg. Bal		21,756	1,300	
BDE			+760	-760
Collections	Not needed to answer question			
Write-off		-1,160	-1,160	
End. Bal		11,362	900	

- A&F has a policy that allows customers to return merchandise within 14 days for a full refund. Assume the company estimated that at the fiscal years ended February 1, 2003 and February 2, 2002, expected returns to be \$3,500k and \$2,900k, respectively. These amounts (allowances for returns) have been included in “Accrued Expenses” on the balance sheets. If A&F had not recorded these allowances for returns, estimate the following items: (ignore the effect of income taxes)

- Retained earnings on February 1, 2003 (3 points)

Retained earnings, as reported	\$714,475
Add: expected returns	<u>3,500</u>
Retained earnings if no allowance for returns	<u>\$717,975</u>

- Net income for the year ended February 1, 2003 (3 points)

Net income, as reported	\$194,935
Add: increase in expected returns	<u>600</u>
Net income if no allowance for returns	<u>\$195,535</u>

- Cash on February 1, 2003 (3 points)

Cash is not affected.	
Cash, as reported	<u>\$391,035</u>

**INVENTORIES (15 POINTS)**

3. Compute the value of inventory purchased in the year ended February 1, 2003. (3 points)

$$\begin{aligned}
 \text{BInv} + \text{Purchases} &= \text{EInv} + \text{COGS} \\
 \text{Purchases} &= \text{EInv} + \text{COGS} - \text{BInv} \\
 &= 144,218 + 939,708 - 108,876 \\
 &= 975,050
 \end{aligned}$$

4. a) Compute the inventory turnover ratio (COGS / average inventory) for the fiscal year ended February 1, 2003. (1 points)

$$\text{Inventory Turnover} = \frac{939,708}{(144,218 + 108,876)/2} = 7.43 \text{ times}$$

b) The notes to A&F's financial statements indicate that the company uses the FIFO cost flow assumption. Given this information, what adjustments, if any, would you make to the turnover ratio you calculated in part (a) in order for the ratio to be a good estimate of physical turnover. (A qualitative response is all that is expected here. 3 points)

A slightly better measure would adjust either the numerator or denominator so that all numbers approximate current cost. However, in this case, no adjustments are necessary because:

- denominator: inventory approximates current cost under FIFO
- numerator: given rapid turnover, COGS approximates current cost (i.e., COGS contains no more than 2 months of costs (1/7.43 yr) from beginning inventory)

5. a) Suppose that A&F had used the LIFO method instead. Assume that the LIFO inventory values would have been \$89,000k and \$57,000k on February 1, 2003 and February 2, 2002, respectively. Compute the cost of goods sold that A&F would have reported had it used LIFO instead of FIFO. (5 points)

$$\begin{aligned}
 \text{Method 1: } \text{COGS}_{\text{LIFO}} &= \text{BInv}_{\text{LIFO}} + \text{Purchases} - \text{EInv}_{\text{LIFO}} \\
 &= 57,000 + 975,050 - 89,000 \\
 &= 943,050
 \end{aligned}$$

$$\begin{aligned}
 \text{Method 2: } \text{LIFO Reserve}_{2003} &= 144,218 - 89,000 = 55,218 \\
 \text{LIFO Reserve}_{2002} &= 108,876 - 57,000 = 51,876 \\
 \text{COGS}_{\text{LIFO}} &= \text{COGS}_{\text{FIFO}} + \Delta \text{LIFO Reserve} \\
 &= 939,708 + (55,218 - 51,876) \\
 &= 939,708 + 3,342 \\
 &= 943,050
 \end{aligned}$$

b) Compute the cumulative amount of taxes that A&F would have saved by using the LIFO method. Assume a tax rate of 35%. (3 points)

$$\begin{aligned}
 \text{Tax saved} &= \text{LIFO Reserve} \times \text{Tax Rate} \\
 &= 55,218 \times 35\% \\
 &= 19,326.3
 \end{aligned}$$

**CASH FLOWS (20 POINTS)**

6. Shown below is the first portion of A&F’s Statement of Cash Flows (indirect method) for the year ended February 1, 2003. Provide four other adjustments in the **Operating Activities** section of the statement. Be sure to indicate the direction of the adjustment (add or subtract). (Note: Marketable securities are not an operating asset.) (8 points)

	<u>000’s</u>
Net income	\$194,935
Add: depreciation	\$56,925
Add: ↓ Accounts receivable	9,994
Subtract: ↑ Inventory	(35,342)
Subtract: ↑ Supplies and Other	(8,462)
Add: ↑ Accounts payable	18,256
Add: ↑ Accrued expenses	10,852
Add: ↑ Tax payable	18,783
Add: ↑ Deferred tax	19,616

7. For the year ended February 1, 2003, A&F reported Investing Cash Flow of -\$26,802k and Financing Cash Flow of -\$42,973k. Using this information and the balance sheets, compute Operating Cash Flow for the year ended February 1, 2003. (3 points)

$$\begin{aligned} \Delta\text{Cash} &= \text{Operating CF} + \text{Investing CF} + \text{Financing CF} \\ \text{Op. CF} &= \Delta\text{Cash} - \text{Investing CF} - \text{Financing CF} \\ &= 223,371 - (-26,802) - (-42,973) \\ &= 293,146 \end{aligned}$$

8. Provide your qualitative assessment of A&F’s ability to generate cash flows. (3 points)

A variety of responses could be made here. The most reasonable inference is that the company is able to generate a considerable amount of cash from its operations, even while growing its business rapidly. The operating cash flow far exceeds the amounts used for investing and financing activities.

9. Assume that “Accounts Payable” relates entirely to inventory purchases. Estimate the amount of cash A&F paid for inventory purchases in the year ended February 1, 2003. (6 points)

	Cash	Inventory	Accts Payable	Retained Earnings
Beg. Bal		108,876	31,897	
Purchases		975,050	975,050	
COGS		-939,708		-939,708
Payments	-956,794		-956,794	
End. Bal		144,218	50,153	

An alternative way to come to the same answer is as follows:

$$\begin{aligned} \text{Payments of inventory} &= \text{COGS} + \Delta\text{Inventory} - \text{Accts Payable} \\ &= 939,708 + 35,342 - 18,256 \\ &= 956,794 \end{aligned}$$

## TRANSACTIONS FOR QUESTION I

1. During 2002, the company purchased \$6,320,000 of groceries on account.
2. The company made \$7,900,000 of credit sales to grocery retailers during 2002.
3. On June 30, 2002, the company prepaid \$108,000 for one year of store rental.
4. The company had beginning accounts payable of \$430,000 on January 1, 2002 and accounts payable of 445,000 on December 31, 2002. Record the cash payments, noting that accounts payables were increased by transaction 1.
5. On December 15, 2002, a consulting firm issued a report stating that the "WMD" brand name has declined in value by \$500,000 because of negative associations with "Weapons of Mass Destruction." WMD had no brand name asset recorded on its December 31, 2001 balance sheet.
6. WMD collected \$7,820,000 from customers during 2002.
7. During 2002, the company paid debt holders \$67,000 for interest incurred in the year.
8. The company declared and paid \$42,000 of dividends.
9. WMD employees took a physical count of inventory on December 31, 2002. The cost of goods in the company's possession on that date was \$929,000. The cost of goods in the company's possession on January 1, 2002 was \$896,000.
10. During 2002, the company paid its employees \$1,230,000 in wages and benefits for work performed in 2002.
11. The last payday for the company was December 30, 2002. Employees had earned, but the company had not yet recorded, \$4,000 of wages for work done on December 31, 2002.
12. Adjust for the unused rent at December 31, 2002. Note that Prepaid Rent on January 1, 2002 was 51,000 and that Food Lion never prepaays rent for more than one year.
13. WMD calculates that \$70,000 should be recorded as depreciation on its warehouses and machinery.

## Abercrombie & Fitch

### BALANCE SHEETS

<i>(Thousands)</i>	February 1 2003	February 2 2002
<b>Assets</b>		
<b>Current Assets</b>		
Cash and Equivalents	\$391,035	\$167,664
Marketable Securities	10,000	71,220
Receivables, net of allowance for doubtful accounts of \$900 and \$1,300, respectively	10,462	20,456
Inventories	144,218	108,876
Store Supplies and Other	45,441	36,979
<b>Total Current Assets</b>	<b>601,156</b>	<b>405,195</b>
<b>Property and Equipment, Net</b>	<b>392,941</b>	<b>365,112</b>
<b>Other Assets</b>	<b>725</b>	<b>239</b>
<b>Total Assets</b>	<b>\$994,822</b>	<b>\$770,546</b>
<b>Liabilities and Shareholders' Equity</b>		
<b>Current Liabilities</b>		
Accounts Payable	\$ 50,153	\$ 31,897
Accrued Expenses	120,438	109,586
Income Taxes Payable	40,879	22,096
<b>Total Current Liabilities</b>	<b>211,470</b>	<b>163,579</b>
<b>Deferred Income Taxes</b>	<b>20,781</b>	<b>1,165</b>
<b>Other Long-Term Liabilities</b>	<b>13,044</b>	<b>10,368</b>
<b>Shareholders' Equity</b>		
Common Stock – \$.01 par value: 150,000,000 shares authorized, 97,268,877 and 98,871,478 shares outstanding at February 1, 2003 and February 2, 2002, respectively	1,033	1,033
Paid-In Capital	142,577	141,394
Retained Earnings	714,475	519,540
	858,085	661,967
Less: Treasury Stock, at Average Cost	(108,558)	(66,533)
<b>Total Shareholders' Equity</b>	<b>749,527</b>	<b>595,434</b>
<b>Total Liabilities and Shareholders' Equity</b>	<b>\$994,822</b>	<b>\$770,546</b>

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## Abercrombie & Fitch

### STATEMENTS OF INCOME

<i>(Thousands)</i>	For years ended	February 1, 2003	February 2, 2002	February 3, 2001
<b>Net Sales</b>		\$1,595,757	\$1,364,853	\$1,237,604
Cost of Goods Sold		939,708	806,819	728,229
<b>Gross Income</b>		656,049	558,034	509,375
General, Administrative and Store Operating Expenses		343,432	286,576	255,723
<b>Operating Income</b>		312,617	271,458	253,652
Interest Income, Net		(3,768)	(5,064)	(7,801)
<b>Income Before Income Taxes</b>		316,385	276,522	261,453
Provision for Income Taxes		121,450	107,850	103,320
<b>Net Income</b>		\$ 194,935	\$ 168,672	\$ 158,133

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