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Income Statement (for the period)

NET SALES	\$a
COST OF GOODS SOLD	b
GROSS MARGIN	a – b = c
SALES & MARKETING	d
RESEARCH & DEVELOPMENT	e
GENERAL & ADMINISTRATIVE	f
OPERATING EXPENSES	d + e + f = g
INCOME FROM OPERATIONS	c – g = h
INTEREST INCOME	i
INCOME TAX	j
NET INCOME	\$h + i – j = k

Balance Sheet (as of a specific date)

Assets	Liabilities & Equity
CASH	ACCOUNTS PAYABLE
ACCOUNTS RECEIVABLE	ACCRUED EXPENSES
INVENTORY	CURRENT PORTION OF DEBT
PREPAID EXPENSES	INCOME TAXES PAYABLE
CURRENT ASSETS	CURRENT LIABILITIES
OTHER ASSETS	LONG-TERM DEBT
FIXED ASSETS @ COST	CAPITAL STOCK
ACCUMULATED DEPRECIATION	RETAINED EARNINGS
NET FIXED ASSETS	SHAREHOLDERS' EQUITY
TOTAL ASSETS	TOTAL LIABILITIES & EQUITY

Assets

Balance Sheet (as of a specific date)

CASH a most liquid
ACCOUNTS RECEIVABLE b
INVENTORY c
PREPAID EXPENSES d
CURRENT ASSETS a + b + c + d = e
OTHER ASSETS f
FIXED ASSETS @ COST g least liquid
ACCUMULATED DEPRECIATION h
NET FIXED ASSETS g – h = i
TOTAL ASSETS e + f + i = j

Current Assets

Balance Sheet (as of a s/cific date)

Assets

CASH	// a
ACCOUNTS RECEIVABLE	// b
INVENTORY	c
PREPAID EXPENSES	d
CURRENT ASSETS	a+b+c+d=0
CORREINI ASSEIS	u · b · c · u - e
OTHER ASSETS	
	f
OTHER ASSETS	f g

TOTAL ASSETS e + f + i = j

Balance Sheet (as of a specific date)

CASH a
ACCOUNTS RECEIVABLE b
INVENTORY c
PREPAID EXPENSES d
CURRENT ASSETS a + b + c + d = e
OTHER ASSETS f
FIXED ASSETS @ COST g
ACCUMULATED DEPRECIATION h
NET FIXED ASSETS g – h = i
TOTAL ASSETS e + f + i = j

Assets

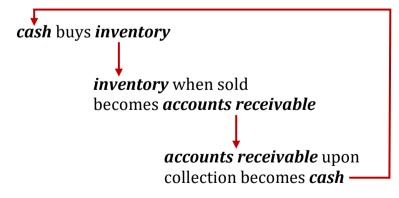
CASH a
ACCOUNTS RECEIVABLE b
INVENTORY c
PREPAID EXPENSES d
CURRENT ASSETS a + b + c + d = e
OTHER ASSETS f
FIXED ASSETS @ COST g
ACCUMULATED DEPRECIATION h
NET FIXED ASSETS g - h = i
TOTAL ASSETS e + f + i = j

Balance Sheet (as of a specific date)

CASH a	
ACCOUNTS RECEIVABLE b	
INVENTORY c	
PREPAID EXPENSES d	
CURRENT ASSETS a + b + c + d = e	
OTHER ASSETS f	
FIXED ASSETS @ COST g	
ACCUMULATED DEPRECIATION h	
NET FIXED ASSETS g – h = i	
TOTAL ASSETS e+f+i=i	•

Balance Sheet (as of a specific date) Assets CASH a ACCOUNTS RECEIVABLE b INVENTORY c PREPAID EXPENSES d CURRENT ASSETS d CURRENT ASSETS f FIXED ASSETS © COST g ACCUMULATED DEPRECIATION b NET FIXED ASSETS g - h = i TOTAL ASSETS e + f + i = j

Current Asset Cycle



CASH a
ACCOUNTS RECEIVABLE b
INVENTORY c
PREPAID EXPENSES d
CURRENT ASSETS a + b + c + d = e
OTHER ASSETS f
FIXED ASSETS @ COST g
ACCUMULATED DEPRECIATION h
NET FIXED ASSETS g – h = i
TOTAL ASSETS 0 + f + i = i

Balance Sheet (as of a specific date)

CASH	a
ACCOUNTS RECEIVABLE	b
INVENTORY	c
PREPAID EXPENSES	d
CURRENT ASSETS	a + b + c + d = e
OTHER ASSETS	f
FIXED ASSETS @ COST	g
ACCUMULATED DEPRECIATION	h
NET FIXED ASSETS	g – h = i
TOTAL ASSETS	A + f + i = i

Assets

CASH a
ACCOUNTS RECEIVABLE b
INVENTORY c
PREPAID EXPENSES d
CURRENT ASSETS a + b + c + d = e
OTHER ASSETS f
FIXED ASSETS @ COST g
ACCUMULATED DEPRECIATION h
NET FIXED ASSETS g - h = i

Balance Sheet (as of a specific date)

TOTAL ASSETS e + f + i = j

CASH a
ACCOUNTS RECEIVABLE b
INVENTORY c
PREPAID EXPENSES d
CURRENT ASSETS a + b + c + d = e
OTHER ASSETS f
FIXED ASSETS @ COST g
ACCUMULATED DEPRECIATION h
NET FIXED ASSETS g – h = i
TOTAL ASSETS e + f + i = j

Liabilities & Shareholders' Equity

a	. ACCOUNTS PAYABLE
b	. ACCRUED EXPENSES
c	. CURRENT PORTION OF DEBT
d	. INCOME TAXES PAYABLE
a + b + c + d = e	. CURRENT LIABILITIES
f	. LONG-TERM DEBT
g	. CAPITAL STOCK
h	. RETAINED EARNINGS
g + h = i	. SHAREHOLDERS' EQUITY
Δ+f+i=i	YILLOH & PAILITANT

Current Liabilities

Balance S et (as of a specific date)

Liabilities & Shar volders' Equity

a\\	ACCOUNTS PAYABLE
b	ACCRUED EXPENSES CURRENT PORTION OF DEBT
c	CURRENT PORTION OF DEBT
d	INCOME TAXES PAYABLE
a + b + c + d = e	CURRENT LIABILITIES
f	LONG-TERM DEBT
fg	
	CAPITAL STOCK
g	CAPITAL STOCK RETAINED EARNINGS

Liabilities & Shareholders' Equity

a ACCO	UNTS PAYABLE
b ACCRI	UED EXPENSES
c CURRE	NT PORTION OF DEBT
d INCOM	ME TAXES PAYABLE
a + b + c + d = e	NT LIABILITIES
f LONG	-TERM DEBT
g CAPITA	AL STOCK
h RETAIN	IED EARNINGS
g + h = i SHARE	HOLDERS' EQUITY
e + f + i = j TOTAL	LIABILITIES & EQUITY

Balance Sheet (as of a specific date)

Liabilities & Shareholders' Equity

a	ACCOUNTS PAYABLE
b	ACCRUED EXPENSES
c C	CURRENT PORTION OF DEBT
dII	NCOME TAXES PAYABLE
a + b + c + d = e	CURRENT LIABILITIES
fL	ONG-TERM DEBT
g C	CAPITAL STOCK
h R	ETAINED EARNINGS
g + h = iS	HAREHOLDERS' EQUITY
e + f + i = j T	OTAL LIABILITIES & EQUITY

Liabilities & Shareholders' Equity

u	ACCOUNTSTATABLE
b	ACCRUED EXPENSES
c	CURRENT PORTION OF DEBT
d	INCOME TAXES PAYABLE
a + b + c + d = e	CURRENT LIABILITIES
f	LONG-TERM DEBT

ACCOUNTS PAYABLE

g CAPITAL STOCK
h RETAINED EARNINGS

g + h = i SHAREHOLDERS' EQUITY

e + f + i = j TOTAL LIABILITIES & EQUITY

Balance Sheet (as of a specific date)

Liabilities & Shareholders' Equity

a ACCOUNTS PAYABLE
b ACCRUED EXPENSES

c CURRENT PORTION OF DEBT

d INCOME TAXES PAYABLE

a + b + c + d = e CURRENT LIABILITIES

f LONG-TERM DEBT

g CAPITAL STOCK

h RETAINED EARNINGS

g + h = i SHAREHOLDERS' EQUITY

e + f + i = jTOTAL LIABILITIES & EQUITY

Liabilities

Balance \ heet (as of a specific date)

Liabilities & Sha sholders' Equity

a	\ ACCOUNTS PAYABLE	
b		

Balance Sheet (as of a specific date)

Liabilities & Shareholders' Equity

- a ACCOUNTS PAYABLE
- b ACCRUED EXPENSES
- C CURRENT PORTION OF DEBT
- d INCOME TAXES PAYABLE
- a + b + c + d = e CURRENT LIABILITIES
- f LONG-TERM DEBT
- g CAPITAL STOCK
- h RETAINED EARNINGS
- g + h = iSHAREHOLDERS' EQUITY
 e + f + i = jTOTAL LIABILITIES & EQUITY

Liabilities & Shareholders' Equity

- f LONG-TERM DEBT
- g CAPITAL STOCK
- h RETAINED EARNINGS
- g + h = i SHAREHOLDERS' EQUITY
- e + f + i = i TOTAL LIABILITIES & EQUITY

Balance Sheet (as of a specific date)

Liabilities & Shareholders' Equity

- a ACCOUNTS PAYABLE
- b ACCRUED EXPENSES
- C CURRENT PORTION OF DEBT
- d INCOME TAXES PAYABLE
- a + b + c + d = e CURRENT LIABILITIES
- f LONG-TERM DEBT
- g CAPITAL STOCK
- h RETAINED EARNINGS
- g + h = i SHAREHOLDERS' EQUITY
 e + f + i = j TOTAL LIABILITIES & EQUITY

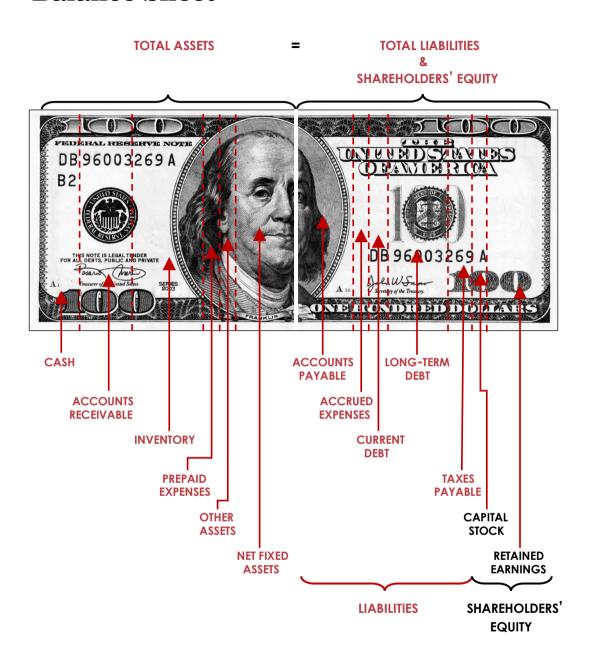
Liabilities & Shareholders' Equity

a	. ACCOUNTS PAYABLE
b	. ACCRUED EXPENSES
c	. CURRENT PORTION OF DEBT
d	. INCOME TAXES PAYABLE
a + b + c + d = e	. CURRENT LIABILITIES
f	. LONG-TERM DEBT
g	. CAPITAL STOCK
h	. RETAINED EARNINGS
g + h = i	. SHAREHOLDERS' EQUITY
e + f + i = j	TOTAL LIABILITIES & EQUITY

Balance Sheet (as of a specific date)

Assets	Liabilities & Equity
CASH	ACCOUNTS PAYABLE
ACCOUNTS RECEIVABLE	ACCRUED EXPENSES
INVENTORY	CURRENT PORTION OF DEBT
PREPAID EXPENSES	INCOME TAXES PAYABLE
CURRENT ASSETS	CURRENT LIABILITIES
OTHER ASSETS	LONG-TERM DEBT
FIXED ASSETS @ COST	CAPITAL STOCK
ACCUMULATED DEPRECIATION	
NET FIXED ASSETS	SHAREHOLDERS' EQUITY
TOTAL ASSETS	TOTAL LIABILITIES & EQUITY

Balance Sheet



Income Statement (for the period) NET SALES ________ a COST OF GOODS SOLD _______ b GROSS MARGIN _______ a - b = c SALES & MARKETING _______ d RESEARCH & DEVELOPMENT _______ e GENERAL & ADMINISTRATIVE ______ f OPERATING EXPENSES _______ d + e + f = g INCOME FROM OPERATIONS ______ c - g = h

The Income Statement

INTEREST INCOMEi
INCOME TAX

NET INCOME h + i - j = k

NET SALES



Income Statement (for the period)

NET SALES	a
COST OF GOODS SOLD	b
GROSS MARGIN	a – b = c
SALES & MARKETING	d
RESEARCH & DEVELOPMENT	e
GENERAL & ADMINISTRATIVE	. f
OPERATING EXPENSES	. d + e + f = g
OPERATING EXPENSES INCOME FROM OPERATIONS	•
	c – g = h
INCOME FROM OPERATIONS	c – g = h i

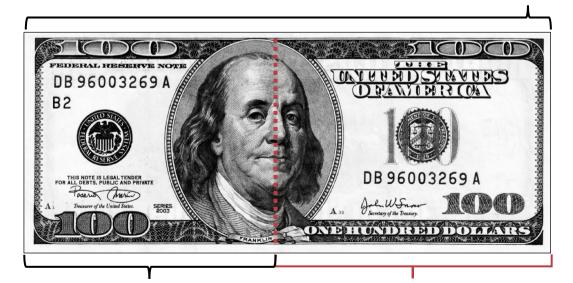
Income Statement (for the period)

NET SALES	a
COST OF GOODS SOLD	. b
GROSS MARGIN	. a – b = c
SALES & MARKETING	d
RESEARCH & DEVELOPMENT	. e
GENERAL & ADMINISTRATIVE	. f
OPERATING EXPENSES	. d + e + f = g
INCOME FROM OPERATIONS	c – g = h
INTEREST INCOME	i
INCOME TAX	j
NET INCOME	.h+i-j=k

NET SALES	a
COST OF GOODS SOLD	b
GROSS MARGIN	a – b = c
SALES & MARKETING	d
RESEARCH & DEVELOPMENT	e
GENERAL & ADMINISTRATIVE	f
OPERATING EXPENSES	d + e + f = g
INCOME FROM OPERATIONS	c – g = h
INTEREST INCOME	i
INCOME TAX	j
NET INCOME	h + i – i = k

Gross Margin

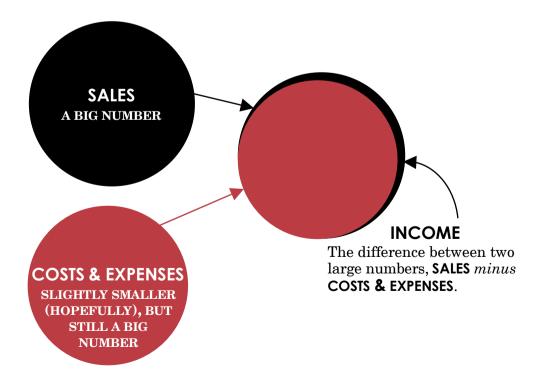
NET SALES



COST OF GOODS SOLD

GROSS MARGIN

Income or Loss



NET SALES a
COST OF GOODS SOLDb
GROSS MARGIN $a - b = c$
SALES & MARKETING d
RESEARCH & DEVELOPMENTe
GENERAL & ADMINISTRATIVE f
OPERATING EXPENSES d + e + f = g
INCOME FROM OPERATIONS c – g = h
INTEREST INCOMEi
INCOME TAXj
NET INCOME h + i - j = k

Income Statement (for the period)

NET SALES	a
COST OF GOODS SOLD	b
GROSS MARGIN	a – b = c
SALES & MARKETING	d
RESEARCH & DEVELOPMENT	e
GENERAL & ADMINISTRATIVE	f
OPERATING EXPENSES	d + e + f = g
INCOME FROM OPERATIONS	c – g = h
INTEREST INCOME	i
INCOME TAX	j
NET INCOME	h + i – i = k

NET SALES	a
COST OF GOODS SOLD	b
GROSS MARGIN	a – b = c
SALES & MARKETING	d
RESEARCH & DEVELOPMENT	e
GENERAL & ADMINISTRATIVE	f
OPERATING EXPENSES	d + e + f = g
INCOME FROM OPERATIONS	
	c – g = h
INCOME FROM OPERATIONS	c – g = h i

Top Line

Income/statement (for the period)

NET SALES	a
COST OF GOODS SOLD	
GROSS MARGIN	a – b = c
SALES & MARKETING	d
RESEARCH & DEVELOPMENT	e
GENERAL & ADMINISTRATIVE	f
OPERATING EXPENSES	d + e + f = g
INCOME FROM OPERATIONS	c – g = h
INTEREST INCOME	i
INCOME TAX	j
NET INCOME	h + i – j = k

Bottom Line

NET SALES a	
COST OF GOODS SOLDb	
GROSS MARGIN a - b = c	
SALES & MARKETING d	
RESEARCH & DEVELOPMENTe	
GENERAL & ADMINISTRATIVE f	
OPERATING EXPENSES d + e + f = g	
INCOME FROM OPERATIONSc-g = h	
INTEREST INCOMEi	
INCOME TAXj	
NET INCOME	

Cash Flow Statement (for the period)

BEGINNING CASH BALANCE	a
CASH RECEIPTS	b
CASH DISBURSEMENTS	c
CASH FROM OPERATIONS	b – c + d
FIXED ASSET PURCHASES	e
NET BORROWINGS	f
INCOME TAXES PAID	g
SALE OF STOCK	h
ENDING CASH BALANCE	a + b – e + f – g + h = i

NET BORROWINGS f
INCOME TAXES PAID g
SALE OF STOCK h

ENDING CASH BALANCE a + b - e + f - g + h = i

Cash Flow Statement (for the period)

SALE OF STOCKh

ENDING CASH BALANCE a + b - e + f - g + h = i

Cash Flow Statement (for the period)

ENDING CASH BALANCE a + b - e + f - g + h = i

Cash Flow Statement (for the period)

BEGINNING CASH BALANCE a
CASH RECEIPTSb

SALE OF STOCKh

CASH DISBURSEMENTS c

CASH FROM OPERATIONS b-c+d

FIXED ASSET PURCHASES e
NET BORROWINGS f

INCOME TAXES PAIDg
SALE OF STOCKh

ENDING CASH BALANCE a + b - e + f - g + h = i

Cash Flow Statement (for the period) BEGINNING CASH BALANCE ... a CASH RECEIPTS ... b CASH DISBURSEMENTS ... c CASH FROM OPERATIONS ... b - c + d FIXED ASSET PURCHASES ... e NET BORROWINGS ... f INCOME TAXES PAID ... g SALE OF STOCK ... h

ENDING CASH BALANCE a + b - e + f - g + h = i

Cash Flow Statement (for the period)

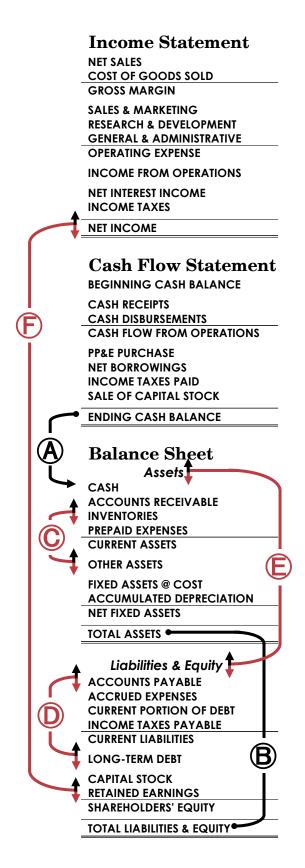
BEGINNING CASH BALANCE a
CASH RECEIPTS b
CASH DISBURSEMENTSc
CASH FROM OPERATIONS b - c + d
FIXED ASSET PURCHASESe
NET BORROWINGS f
INCOME TAXES PAIDg
SALE OF STOCKh
ENDING CASH BALANCE $a + b - e + f - g + h = i$

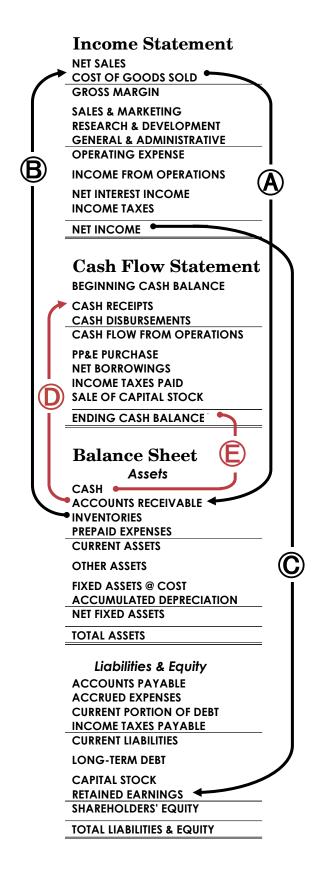
Cash Flow Statement (for the period)

Cash Flow Statement (for the period)

Cash Flow Statement (for the period)

BEGINNING CASH BALANCE	a
CASH RECEIPTS	b
CASH DISBURSEMENTS	c
CASH FROM OPERATIONS	b – c + d
FIXED ASSET PURCHASES	e
NET BORROWINGS	f
INCOME TAXES PAID	g
SALE OF STOCK	h
ENDING CASH BALANCE	a + b - e + f - a + b = i





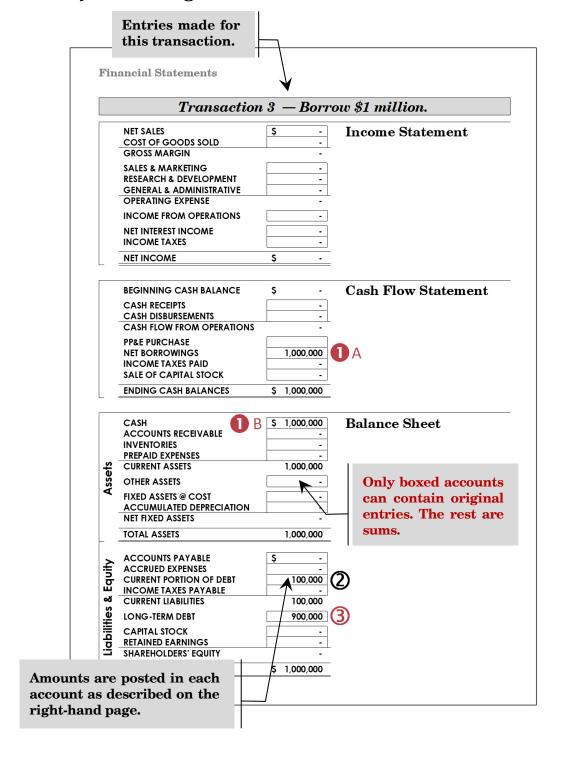
Income Statement NET SALES COST OF GOODS SOLD **GROSS MARGIN SALES & MARKETING RESEARCH & DEVELOPMENT GENERAL & ADMINISTRATIVE** OPERATING EXPENSE **INCOME FROM OPERATIONS NET INTEREST INCOME INCOME TAXES** NET INCOME . **Cash Flow Statement BEGINNING CASH BALANCE CASH RECEIPTS CASH DISBURSEMENTS CASH FLOW FROM OPERATIONS** PP&E PURCHASE **NET BORROWINGS INCOME TAXES PAID SALE OF CAPITAL STOCK ENDING CASH BALANCE Balance Sheet Assets** CASH • **ACCOUNTS RECEIVABLE INVENTORIES PREPAID EXPENSES CURRENT ASSETS OTHER ASSETS FIXED ASSETS @ COST ACCUMULATED DEPRECIATION NET FIXED ASSETS TOTAL ASSETS** Liabilities & Equity ACCOUNTS PAYABLE **ACCRUED EXPENSES CURRENT PORTION OF DEBT INCOME TAXES PAYABLE CURRENT LIABILITIES LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS** SHAREHOLDERS' EQUITY **TOTAL LIABILITIES & EQUITY**

NET SALES COST OF GOODS SOLD GROSS MARGIN SALES & MARKETING RESEARCH & DEVELOPMENT GENERAL & ADMINISTRATIVE OPERATING EXPENSE INCOME FROM OPERATIONS NET INTEREST INCOME INCOME TAXES NET INCOME Cash Flow Statement BEGINNING CASH BALANCE CASH RECEIPTS CASH DISBURSEMENTS CASH FLOW FROM OPERATIONS PP&E PURCHASE NET BORROWINGS • **INCOME TAXES PAID SALE OF CAPITAL STOCK ENDING CASH BALANCES Balance Sheet Assets CASH** ◀ **ACCOUNTS RECEIVABLE INVENTORIES PREPAID EXPENSES CURRENT ASSETS OTHER ASSETS FIXED ASSETS @ COST ACCUMULATED DEPRECIATION NET FIXED ASSETS TOTAL ASSETS Liabilities & Equity ACCOUNTS PAYABLE ACCRUED EXPENSES CURRENT PORTION OF DEBT INCOME TAXES PAYABLE CURRENT LIABILITIES** LONG-TERM DEBT **CAPITAL STOCK RETAINED EARNINGS** SHAREHOLDERS' EQUITY **TOTAL LIABILITIES & EQUITY**

Income Statement

Income Statement NET SALES COST OF GOODS SOLD GROSS MARGIN SALES & MARKETING RESEARCH & DEVELOPMENT GENERAL & ADMINISTRATIVE OPERATING EXPENSE INCOME FROM OPERATIONS NET INTEREST INCOME INCOME TAXES NET INCOME **Cash Flow Statement BEGINNING CASH BALANCE CASH RECEIPTS CASH DISBURSEMENTS CASH FLOW FROM OPERATIONS** ●PP&E PURCHASE **NET BORROWINGS INCOME TAXES PAID SALE OF CAPITAL STOCK** ENDING CASH BALANCE **Balance Sheet Assets** CASH ← **ACCOUNTS RECEIVABLE INVENTORIES PREPAID EXPENSES CURRENT ASSETS OTHER ASSETS** FIXED ASSETS @ COST **ACCUMULATED DEPRECIATION** NET FIXED ASSETS **TOTAL ASSETS Liabilities & Equity ACCOUNTS PAYABLE ACCRUED EXPENSES CURRENT PORTION OF DEBT INCOME TAXES PAYABLE CURRENT LIABILITIES LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS** SHAREHOLDERS' EQUITY **TOTAL LIABILITIES & EQUITY**

Transaction Spread — Left-Hand Page



Transaction Spread — Right-Hand Page

Transactions are described in detail at the top of the right-hand page.

Startup Financing and Staffing

T3. Borrow \$1 million to buy a building. Terms of this 10-year mortgage are 10% interest per annum.

Go to the bank and apply for a loan to buy a building to (1) manufacture and warehouse applesauce, and (2) house the administrative and sales activities of the company.

The friendly loan officer agrees that AppleSeed has a strong equity capital base and good prospects. She agrees to lend you a cool million to buy the building but demands that you pledge all the assets of the company to collateralize the loan. That's okay.

She also asks for your personal guarantee to repay the loan if the company cannot. What do you say? The correct answer is **no**. If the business fails, you don't want to lose your home too.

You and your friendly banker agree on a 10-year loan amortization (that is, "payback") schedule shown on the right.

Loan Amortization Schedule

YEAR	INTEREST	PRINCIPAL	OUTSTANDING
	PAYMENTS	PAYMENTS	PRINCIPAL
1	\$100,000	\$100,000	\$900,000
3	\$80,000	\$100,000	\$700,000
4	\$70,000	\$100,000	\$600,000
5	\$60,000	\$100,000	\$500,000
6	\$50,000	\$100,000	\$400,000
7	\$40,000	\$100,000	\$300,000
8	\$30,000	\$100,000	\$200,000
9	\$20,000	\$100,000	\$100,000
10	\$10,000	\$100,000	\$0
TOTAL	\$550,000	\$1,000,000	

Transaction: Borrow \$1 million to purchase an all-purpose building. This term note will run for 10 years, calling for yearly principal payments of \$100,000 plus interest at a rate of 10% per annum.

- (1A) At the loan closing the friendly banker deposits \$1 million in your checking account, thus increasing NET BORROWINGS in the Cash Flow Statement. (1B) Remember also, CASH increases by \$1 million in the assets section of the Balance Sheet.
- The CURRENT PORTION OF DEBT (that is, the amount that will be repaid this year) is \$100,000 and is listed in the current liabilities section of the *Balance Sheet*.
- The remaining debt of \$900,000 will be repaid more than one year in the future and thus is listed as LONG-TERM DEBT in the Balance Sheet.

Note: This transaction just books the loan. We will pay down the principal and interest in a later transaction.

Read the account posting descriptions on the right-hand page. Then look at the corresponding numbered circles in the financial statements on the left-hand page. See how the changes to the statements are recorded.

Transaction 1. — Sell Stock **Income Statement NET SALES** \$ **COST OF GOODS SOLD GROSS MARGIN SALES & MARKETING RESEARCH & DEVELOPMENT GENERAL & ADMINISTRATIVE OPERATING EXPENSE** INCOME FROM OPERATIONS **NET INTEREST INCOME INCOME TAXES NET INCOME** \$ **Cash Flow Statement BEGINNING CASH BALANCE** \$ **CASH RECEIPTS CASH DISBURSEMENTS CASH FLOW FROM OPERATIONS PP&E PURCHASE NET BORROWINGS INCOME TAXES PAID** SALE OF CAPITAL STOCK 1,500,000 **ENDING CASH BALANCES** \$ 1.500,000 **Balance Sheet** CASH 1,500,000 **ACCOUNTS RECEIVABLE INVENTORIES** PREPAID EXPENSES 1,500,000 **CURRENT ASSETS OTHER ASSETS FIXED ASSETS @ COST ACCUMULATED DEPRECIATION NET FIXED ASSETS** TOTAL ASSETS 1,500,000 **ACCOUNTS PAYABLE** \$ **ACCRUED EXPENSES CURRENT PORTION OF DEBT INCOME TAXES PAYABLE** Liabilities & **CURRENT LIABILITIES LONG-TERM DEBT CAPITAL STOCK** 1,500,000 **RETAINED EARNINGS** SHAREHOLDERS' EQUITY 1.500.000

Note: Total Assets must always equal Total Liabilities & Equity as per the basic equation of accounting.

\$ 1,500,000

TOTAL LIABILITIES & EQUITY

Transaction 2. - Pay Salary & Book Fringes

NET SALES	S - Income Statement
COST OF GOODS SOLD	
GROSS MARGIN	-
SALES & MARKETING	-
RESEARCH & DEVELOPMENT	• 👝
GENERAL & ADMINISTRATIVE	6,230 A
OPERATING EXPENSE	6,230
INCOME FROM OPERATIONS	•
NET INTEREST INCOME	-
INCOME TAXES	-
NET INCOME	\$ (6,230)

BEGINNING CASH BALANCE	\$ -	Cash Flow Statement
CASH RECEIPTS	-	
CASH DISBURSEMENTS	3,370	12 A
CASH FLOW FROM OPERATIONS	(3,370)	
PP&E PURCHASE	-	
NET BORROWINGS	-	
INCOME TAXES PAID	-	
SALE OF CAPITAL STOCK	-	
ENDING CASH BALANCE	\$ (3,370)	_

Assets	CASH ACCOUNTS RECEIVABLE INVENTORIES PREPAID EXPENSES CURRENT ASSETS OTHER ASSETS FIXED ASSETS @ COST ACCUMULATED DEPRECIATION NET FIXED ASSETS TOTAL ASSETS	\$ (3,370) - - (3,370) - - - (3,370)	Balance Sheet
Liabilities & Equity	ACCOUNTS PAYABLE ACCRUED EXPENSES CURRENT PORTION OF DEBT INCOME TAXES PAYABLE CURRENT LIABILITIES LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY TOTAL LIABILITIES & EQUITY	\$ 2,860 - 2,860 - 2,860 - (6,230) (6,230) (3,370)	3 1 B

FINAL

Transaction 3. — Borrow \$1 million

\$ 1,000,000

NET SALES	\$	-
COST OF GOODS SOLD		-
GROSS MARGIN	•	-
SALES & MARKETING		-
RESEARCH & DEVELOPMENT		-
GENERAL & ADMINISTRATIVE		-
OPERATING EXPENSE	·	-
INCOME FROM OPERATIONS		-
NET INTEREST INCOME		-
INCOME TAXES		-
NET INCOME	S	

Income Statement

BEGINNING CASH BALANCE \$
CASH RECEIPTS
CASH DISBURSEMENTS
CASH FLOW FROM OPERATIONS
PP&E PURCHASE

NET BORROWINGS 1,000,000

INCOME TAXES PAID
SALE OF CAPITAL STOCK -

Cash Flow Statement

	CASH B	\$ 1,000,000
	ACCOUNTS RECEIVABLE	-
	INVENTORIES	-
	PREPAID EXPENSES	-
) ts	CURRENT ASSETS	1,000,000
Assets	OTHER ASSETS	-
٧	FIXED ASSETS @ COST	-
	ACCUMULATED DEPRECIATION	-
	NET FIXED ASSETS	-
	TOTAL ASSETS	1,000,000
	ACCOUNTS PAYARIF	\$ _

ENDING CASH BALANCE

Balance Sheet

ACCOUNTS PAYABLE

ACCRUED EXPENSES

CURRENT PORTION OF DEBT
INCOME TAXES PAYABLE

CURRENT LIABILITIES

LONG-TERM DEBT

CAPITAL STOCK

RETAINED EARNINGS

SHAREHOLDERS' EQUITY

CACCRUED EXPENSES

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TOTAL LIABILITIES & EQUITY

\$ 1,000,000

Loan Amortization Schedule

YEAR	INTEREST PAYMENTS	PRINCIPAL PAYMENTS	OUTSTANDING PRINCIPAL
1	\$100,000	\$100,000	\$900,000
3	\$80,000	\$100,000	\$700,000
4	\$70,000	\$100,000	\$600,000
5	\$60,000	\$100,000	\$500,000
6	\$50,000	\$100,000	\$400,000
7	\$40,000	\$100,000	\$300,000
8	\$30,000	\$100,000	\$200,000
9	\$20,000	\$100,000	\$100,000
10	\$10,000	\$100,000	\$0
TOTAL	\$550,000	\$1,000,000	

Transaction 4. - Buy a Building

NET SALES	\$	-
COST OF GOODS SOLD		-
GROSS MARGIN	•	•
SALES & MARKETING		-
RESEARCH & DEVELOPMENT		-
GENERAL & ADMINISTRATIVE		-
OPERATING EXPENSE		-
INCOME FROM OPERATIONS		-
NET INTEREST INCOME		-
INCOME TAXES		-
NET INCOME	\$	-

Income Statement

BEGINNING CASH BALANCE	\$	-
CASH RECEIPTS		-
CASH DISBURSEMENTS		-
CASH FLOW FROM OPERATIONS		-
PP&E PURCHASE	1,500,00	00
NET BORROWINGS		-
INCOME TAXES PAID		-
SALE OF CAPITAL STOCK		-
ENDING CASH BALANCE	\$ (1,500,00	00)

Cash Flow Statement

	CASH	\$ (1,500,000)	
	ACCOUNTS RECEIVABLE	-	
	INVENTORIES	-	
	PREPAID EXPENSES	-	
şŧ	CURRENT ASSETS	(1,500,000)	
Assets	OTHER ASSETS	-	
٩	FIXED ASSETS @ COST	1,500,000	(
	ACCUMULATED DEPRECIATION	-	-
	NET FIXED ASSETS	1,500,000	
	TOTAL ASSETS	\$0	_
>	ACCOUNTS PAYABLE	\$ -	
Equity	ACCRUED EXPENSES	-	
ठ	CURRENT PORTION OF DEBT	-	
	INCOME TAXES PAYABLE	-	
∞5	CURRENT LIABILITIES	-	
Liabilities &	LONG-TERM DEBT	-	
₩	CAPITAL STOCK	-	
늄	RETAINED EARNINGS	-	
=	SHAREHOLDERS' EQUITY	-	

TOTAL LIABILITIES & EQUITY

Balance Sheet

\$0

Transaction 5. — Pay SG&A Salaries & Book Fringes

NET SALES	\$ -	Income Statement
COST OF GOODS SOLD	-	
GROSS MARGIN	-	_
SALES & MARKETING	7,680	1 1 A
RESEARCH & DEVELOPMENT	-	
GENERAL & ADMINISTRATIVE	7,110	ID B
OPERATING EXPENSE	14,790	
INCOME FROM OPERATIONS	(14,790)	
NET INTEREST INCOME	-	
INCOME TAXES	-	
NET INCOME	\$ (14,790)	_

BEGINNING CASH BALANCE	\$ -	Cash Flow Statement
CASH RECEIPTS	-	
CASH DISBURSEMENTS	7,960	(3)A
CASH FLOW FROM OPERATIONS	(7,960)	
PP&E PURCHASE	-	
NET BORROWINGS		
INCOME TAXES PAID		
SALE OF CAPITAL STOCK	-	
ENDING CASH BALANCE	\$ (7,960)	

	CASH (3) R	\$	(7,960)	Balance Sheet
	ACCOUNTS RECEIVABLE		•	
	INVENTORIES		-	
	PREPAID EXPENSES		-	
şŧ	CURRENT ASSETS	•	(7,960)	
Assets	OTHER ASSETS		-	
٩	FIXED ASSETS @ COST		-	
	ACCUMULATED DEPRECIATION		-	
	NET FIXED ASSETS		-	
	TOTAL ASSETS		(7,960)	-
_	ACCOUNTS PAYABLE	\$	-	
ŧ	ACCRUED EXPENSES		6,830	(4)
Equity	CURRENT PORTION OF DEBT		-	•
	INCOME TAXES PAYABLE		-	
∞ŏ	CURRENT LIABILITIES		6,830	
Liabilities	LONG-TERM DEBT		-	
≡	CAPITAL STOCK		-	
岩	RETAINED EARNINGS		(14,790)	(24
Ť	SHAREHOLDERS' EQUITY	•	(14,790)	•
	TOTAL LIABILITIES & EQUITY	\$	(7,960)	-

SG&A Payroll-Related Expenses

	PAY TO EMPLOYEES	PAY TO OTHERS			
MONTHLY SALARY	\$11,000	-			
EMPLOYEE'S FICA	\$(840)	\$840			
FEDERAL/STATE WITHHOLDING	\$(2,200)	\$2,200			
EMPLOYER'S FICA	-	\$840			
WORKMEN'S COMPENSATION	-	\$400			
UNEMPLOYMENT INSURANCE	-	\$550			
HEALTH & LIFE INSURANCE	-	\$2,000			
TOTALS PER MONTH	\$7,960	\$6,830			
TOTAL PAID TO EMPLOYEES & OTHERS \$14,790					

Transaction 6. — Pay Fringes, FICA, & Withholding Taxes

NET SALES	\$ -
COST OF GOODS SOLD	-
GROSS MARGIN	-
SALES & MARKETING	-
RESEARCH & DEVELOPMENT	-
GENERAL & ADMINISTRATIVE	-
OPERATING EXPENSE	-
INCOME FROM OPERATIONS	-
NET INTEREST INCOME	-
INCOME TAXES	-
NET INCOME	\$

Income Statement

Cash Flow Statement

BEGINNING CASH BALANCE	\$ -
CASH RECEIPTS	-
CASH DISBURSEMENTS	9,690
CASH FLOW FROM OPERATIONS	(9,690)
PP&E PURCHASE	-
NET BORROWINGS	-
INCOME TAXES PAID	-
SALE OF CAPITAL STOCK	-
ENDING CASH BALANCE	\$ (9,690)

	CASH 2	\$	(9,690)	В
	ACCOUNTS RECEIVABLE	·	-	
	INVENTORIES		-	
	PREPAID EXPENSES		-	
sto	CURRENT ASSETS		(9,690)	
Assets	OTHER ASSETS		-	
Q	FIXED ASSETS @ COST		-	
	ACCUMULATED DEPRECIATION		-	
	NET FIXED ASSETS		-	
	TOTAL ASSETS		(9,690)	=
>	ACCOUNTS PAYABLE	\$	-	
Equity	ACCRUED EXPENSES		(9,690)	(3)
5	CURRENT PORTION OF DEBT		-	
ш	INCOME TAXES PAYABLE		-	
ος γ	CURRENT LIABILITIES		(9,690)	
Liabilities &	LONG-TERM DEBT		-	
i	CAPITAL STOCK		-	
늄	RETAINED EARNINGS		-	
Ë	SHAREHOLDERS' EQUITY	-	-	
	TOTAL LIABILITIES & EQUITY	\$	(9,690)	=

A	ppleseed Summary	Fina	ncial	Stat	emen	ts: T	1 thru	ι T6.
In	come Statement	T1 +	T2 +	T3 +	T4 +	T5 +	Т6	= T1 thru T6
	NET SALES	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	COST OF GOODS SOLD	-						-
	GROSS MARGIN	> <	$\geq \leq$	$\geq \leq$	$\geq \leq$	$\geq \leq$	> <	\$0
	SALES & MARKETING	-	-	-	-	7,680	-	7,680
	RESEARCH & DEVELOPMENT	-	-	-	-	-	-	-
	GENERAL & ADMINISTRATIVE	·	6,230	·	Ŀ	7,110	ز ل	13,340
	OPERATING EXPENSE	$\geq \leq$	$\geq \leq$	$\geq \leq$	$\geq \leq$	$\geq \leq$	\sim	\$ 21,020
	INCOME FROM OPERATIONS	$\geq <$	><	><	><	><	><	\$0
	NET INTEREST INCOME	-	_	-	-	_	-	-
	INCOME TAXES	-	-	-	-	-	-	-
	NET INCOME							\$ (21,020
- :	NEI INCOME							+ (1.,010
C	ash Flow Statement	T1 +	T2 +	T3 +	T4 +	T5 +	Т6	= T1 thru T6
	BEGINNING CASH BALANCE	> <	> <	> <	> <	> <	> <	\$ 0
	CASH RECEIPTS	-	-	-		-		
	CASH DISBURSEMENTS	-	3,370	-	-	7,960	9,690	21,020
•	CASH FLOW FROM OPERATIONS	><	>	>	>	>	><	\$ (21,020
	PP&E PURCHASE			-	1,500,000	_	-	1,500,000
	NET BORROWINGS	-	-	1,000,000	-	-	-	1,000,000
	INCOME TAXES PAID	-	-	-	-	-	-	-
	SALE OF CAPITAL STOCK	1,550,000	-	-	-	-	-	1,550,000
	ENDING CASH BALANCES		\geq	\geq	\geq	\geq	\geq	\$1,028,980
B	alance Sheet	T1 +	T2 +	T3 +	T4 +	T5 +	Т6	= T1 thru T6
	CASH							\$1,028,980
	ACCOUNTS RECEIVABLE							-
	INVENTORIES	-	-	-	-	-	-	-
	PREPAID EXPENSES	-	-	-	-	-	-	-
ş	CURRENT ASSETS	><	><	$\geq \leq$	><	><	><	1,028,980
Assets	OTHER ASSETS	-	_	-	-	_	-	_
Ä	FIXED ASSETS @ COST		_	_	1,500,000	_		1,500,000
	ACCUMULATED DEPRECIATION	-	-	-	-	-	-	-
	NET FIXED ASSETS	\sim						1,500,000
	TOTAL ASSETS		$\overline{}$	$\overline{}$	$\overline{}$	$\overline{}$		\$2,528,980
- :								
>	ACCOUNTS PAYABLE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<u></u>	ACCRUED EXPENSES	-	2,860	-	6,830	-	(9,690)	0
ğ	CURRENT PORTION OF DEBT	-	-	100,000	-	-	-	100,000
ш «Х	INCOME TAXES PAYABLE	<u></u>		<u></u>	<u></u>			100.000
S	CURRENT LIABILITIES							100,000
Liabilities & Equity	LONG-TERM DEBT	-	-	900,000	-	-	-	900,000
₩	CAPITAL STOCK + Founding \$50K	1,500,000	-	-	-	-		1,550,000
g	RETAINED EARNINGS	·	(6,230)		(14,790)			(21,020)
≔	SHAREHOLDERS' EQUITY	$\geq \leq$	> <	> <	> <	> <	> <	1,528,980
•	TOTAL LIABILITIES & EQUITY		$\overline{}$	$\overline{}$	$\overline{}$	$\overline{}$	$\overline{}$	\$2,528,980

Transaction 7. — Order Machinery

NET SALES	\$ -
COST OF GOODS SOLD	-
GROSS MARGIN	-
SALES & MARKETING	-
RESEARCH & DEVELOPMENT	-
GENERAL & ADMINISTRATIVE	-
OPERATING EXPENSE	•
INCOME FROM OPERATIONS	-
NET INTEREST INCOME	-
INCOME TAXES	-
NET INCOME	\$ -

Income Statement

BEGINNING CASH BALANCE	\$	-
CASH RECEIPTS		-
CASH DISBURSEMENTS		-
CASH FLOW FROM OPERATIONS	•	-
PP&E PURCHASE		125,000
NET BORROWINGS		-
INCOME TAXES PAID		-
SALE OF CAPITAL STOCK		-
ENDING CASH BALANCE	\$	(125,000)

Cash Flow Statement

	CASH	\$	(125,000)	
	ACCOUNTS RECEIVABLE	-	-	
	INVENTORIES		-	
	PREPAID EXPENSES		-	
şt	CURRENT ASSETS		(125,000)	
Assets	OTHER ASSETS		125,000	(3
Q	FIXED ASSETS @ COST		-	
	ACCUMULATED DEPRECIATION		-	
	NET FIXED ASSETS		-	
_	TOTAL ASSETS		-	_
		_		
>	ACCOUNTS PAYABLE	\$	-	
≒	ACCRUED EXPENSES		-	
Equity	CURRENT PORTION OF DEBT		-	
ш	INCOME TAXES PAYABLE		-	
<u>«</u> ۆ	CURRENT LIABILITIES		-	
Liabilities	LONG-TERM DEBT		-	
ij	CAPITAL STOCK		-	
늄	RETAINED EARNINGS		-	
÷	SHAREHOLDERS' FOLLITY			

TOTAL LIABILITIES & EQUITY

Transaction 8. — Receive Machinery & Pay Balance Due

NET SALES	\$	-
COST OF GOODS SOLD		-
GROSS MARGIN	•	•
SALES & MARKETING		-
RESEARCH & DEVELOPMENT		-
GENERAL & ADMINISTRATIVE		-
OPERATING EXPENSE	•	-
INCOME FROM OPERATIONS		-
NET INTEREST INCOME		-
INCOME TAXES		-
NET INCOME	\$	-

Income Statement

BEGINNING CASH BALANCE	\$ -
CASH RECEIPTS	-
CASH DISBURSEMENTS	-
CASH FLOW FROM OPERATIONS	-
PP&E PURCHASE	125,000
NET BORROWINGS	-
INCOME TAXES PAID	-
SALE OF CAPITAL STOCK	-
ENDING CASH BALANCE	\$ (125,000)

TOTAL LIABILITIES & EQUITY

Cash Flow Statement

	CASH ACCOUNTS RECEIVABLE	\$	(125,000)	
	INVENTORIES		-	
	PREPAID EXPENSES		-	
ştş	CURRENT ASSETS		(125,000)	
Assets	OTHER ASSETS		(125,000)	
٧	FIXED ASSETS @ COST (4)		250,000	Ī
	ACCUMULATED DEPRECIATION		-	
	NET FIXED ASSETS		250,000	
	TOTAL ASSETS		-	
	ACCOUNTS PAYABLE	\$		
ty	ACCOUNTS PATABLE ACCRUED EXPENSES	Ą	-	
<u>5</u>	CURRENT PORTION OF DEBT		_	
Equity	INCOME TAXES PAYABLE		-	
∞ŏ	CURRENT LIABILITIES		-	
Liabilities	LONG-TERM DEBT		-	
Ħ	CAPITAL STOCK		-	
ak	RETAINED EARNINGS		-	
Ξ	SHAREHOLDERS' EQUITY		-	

Balance Sheet

\$

Transaction 9. - Expense Pre-Production Salaries

NET SALES	\$ -	Income Statement
COST OF GOODS SOLD		
GROSS MARGIN	-	•
SALES & MARKETING		
RESEARCH & DEVELOPMENT		
GENERAL & ADMINISTRATIVE	4,880	GD A
OPERATING EXPENSE	4,880	
INCOME FROM OPERATIONS	(4,880)	
NET INTEREST INCOME		
INCOME TAXES		
NET INCOME	\$ (9,760)	

BEGINNING CASH BALANCE	\$ Cash Flow Stat 	ement
CASH RECEIPTS		
CASH DISBURSEMENTS	2,720 A	
CASH FLOW FROM OPERATIONS	(2,720)	
PP&E PURCHASE		
NET BORROWINGS		
INCOME TAXES PAID		
SALE OF CAPITAL STOCK		
ENDING CASH BALANCES	\$ (2,720)	

	CASH ACCOUNTS RECEIVABLE 2B	\$	(2,720)	Balance Sheet
	INVENTORIES			
	PREPAID EXPENSES			
t s	CURRENT ASSETS		(2,720)	
Assets	OTHER ASSETS			
4	FIXED ASSETS @ COST			
	ACCUMULATED DEPRECIATION			
	NET FIXED ASSETS		-	
	TOTAL ASSETS		(2,720)	_
	ACCOUNTS PAYABLE	\$	-	
ŧ	ACCRUED EXPENSES		2,160	(3)
Equity	CURRENT PORTION OF DEBT		-	
ш	INCOME TAXES PAYABLE			
∞ŏ	CURRENT LIABILITIES		2,160	
Liabilities	LONG-TERM DEBT			
₩	CAPITAL STOCK			
물	RETAINED EARNINGS		(4,880)	ab B
Ë	SHAREHOLDERS' EQUITY	'	(4,880)	
	TOTAL LIABILITIES & EQUITY	\$	(2,720)	=

Production Labor Costs

	TAKE-HOME PAY TO EMPLOYEES	FRINGE BENEFITS AND TAXES	TOTALS
SUPERVISOR	\$2,720	\$2,160	\$4,880
HOURLY WORKERS	\$6,300	\$6,000	\$12,300
MANUFACTURING PAYROLL	\$9,020	\$8,160	\$17,180

AppleSeed Enterprises's Applesauce Bill of Materials

	PRICE PER UNIT OF RAW MATERIAL	UNIT OF MEASURE FOR RAW MATERIAL	QUANTITY REQUIRED PER CASE OF 12 JARS	EXTENDED COST PER CASE OF 12 JARS
APPLES	\$120	TON	33.00 LBS.	\$1.98
SUGAR	\$140	1000 LBS.	2.30 LBS.	\$0.32
CINNAMON	\$280	100 LBS.	0.35 oz.	\$0.06
GLASS JAR	\$55	GROSS	12	\$4.60
JAR CAP	\$10	GROSS	12	\$0.83
JAR LABEL	\$200	10,000	12	\$0.24
LARGE BOX	\$75	GROSS	1	\$0.52
			COST PER CASE	\$8.55

AppleSeed Enterprises' Fixed Asset Depreciation Schedule

	ORIGINAL PURCHASE PRICE	YEARS OF USEFUL LIFE	DEPRECIATION CHARGE EACH YEAR	BOOK VALUE AT END OF YEAR 1	BOOK VALUE AT END OF YEAR 2	BOOK VALUE AT END OF YEAR 3
BUILDING	\$1,000,000	20	\$50,000	\$950,000	\$900,000	\$850,000
LAND	\$500,000	forever	\$0	\$500,000	\$500,000	\$500,000
MACHINERY	\$250,000	7	\$35,714	\$214,286	\$178,572	\$142,858
TOTALS	\$1,750,000		\$85,714	\$1,664,286	\$1,578,572	\$1,492,858

Product Cost @ Three Different Production Levels

	COSTS PER CASE	COSTS PER MONTH
RAW MATERIALS	\$8.55	
DIRECT LABOR	\$0.62	
OVERHEAD— SUPERVISOR		\$4,880
DEPRECIATION		\$7,143
ALL OTHER		\$8,677

TOTAL MANUFACTURING \$ COST IN MONTH

CASES MANUFACTURED IN MONTH

\$ MANUFACTURING COST PER CASE

TOTAL COSTS FOR	TOTAL COSTS FOR	TOTAL COSTS FOR
10,000 CASES	20,000 CASES	30,000 CASES
PER MONTH	PER MONTH	PER MONTH
PRODUCTION	PRODUCTION	PRODUCTION
\$85,500	\$171,000	\$256,500
\$6,150	\$12,300	\$18,450
\$4,880	\$4,880	\$4,880
\$7,143	\$7,143	\$7,143
\$8,677	\$8,677	\$8,677
\$112,350	\$204,000	\$295,650
10,000	20,000	30,000
\$11.24	\$10.20	\$9.86

AppleSeed Enterprises' Standard Cost Calculations by Cost Element @ 20,000 Cases per Month Production Level

	TOTAL COST PER MONTH AT 20,000 CASE PRODUCTION	COST PER CASE	TO EMPLOYEES	FRINGES AND TAXES	TO SUPPLIERS	DEPRECIATION CHARGE
RAW MATERIALS	\$171,000	\$8.55			\$8.55	
DIRECT LABOR	\$12,300	\$0.62	\$0.32	\$0.30		
OVERHEAD—SUPERVISOR	\$4,880	\$0.24	\$0.14	\$0.10		
DEPRECIATION	\$7,143	\$0.36				\$0.36
ALL OTHER	\$8,677	\$0.43			\$0.43	
	\$204,000	\$10.20	\$.46	\$0.40	\$8.98	\$0.36
	TOTA	LS PER MONTH	\$9,020	\$8,160	\$179,677	\$7,143

Transaction 10. — Receive raw materials

NET SALES	\$	-
COST OF GOODS SOLD		-
GROSS MARGIN	·	-
SALES & MARKETING		-
RESEARCH & DEVELOPMENT		-
GENERAL & ADMINISTRATIVE		-
OPERATING EXPENSE		-
INCOME FROM OPERATIONS		-
NET INTEREST INCOME		-
INCOME TAXES		-
NET INCOME	\$	-

Income Statement

BEGINNING CASH BALANCE	\$ -
CASH RECEIPTS	-
CASH DISBURSEMENTS	-
CASH FLOW FROM OPERATIONS	-
PP&E PURCHASE	-
NET BORROWINGS	-
INCOME TAXES PAID	-
SALE OF CAPITAL STOCK	-
ENDING CASH BALANCE	\$ -

Cash Flow Statement

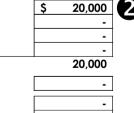
	CASH	\$ -	
	ACCOUNTS RECEIVABLE	-	
	INVENTORIES	20,000	
	PREPAID EXPENSES	-	
şţ	CURRENT ASSETS	20,000	
Assets	OTHER ASSETS	-	
⋖	FIXED ASSETS @ COST	-	
	ACCUMULATED DEPRECIATION	-	
	NET FIXED ASSETS	-	
_	TOTAL ASSETS	20,000	_
			_

ACCOUNTS PAYABLE

ACCRUED EXPENSES
CURRENT PORTION OF DEBT
INCOME TAXES PAYABLE
CURRENT LIABILITIES

LONG-TERM DEBT

Balance Sheet



ilies & Equ

CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY TOTAL LIABILITIES & EQUITY \$ 20,000

Raw Material Costs and Monthly Production Requirements

	QUANTITY PER CARTON	COST PER CARTON
APPLES	33.00 LBS.	\$1.98
SUGAR	2.30 LBS.	\$0.32
CINNAMON	0.35 oz.	\$0.06
GLASS JAR	12	\$4.60
JAR CAP	12	\$0.83
JAR LABEL	12	\$0.24
LARGE BOX	1	\$0.52
	TOTALS	\$8.55

•	•
QUANTITY	EXTENDED
NEEDED	COST FOR
FOR 20,000	20,000
CARTONS	CARTONS
330 tons	\$39,600
52 Tons	\$6,400
438 LBS.	\$1,200
1,667 GROSS	\$92,000
1,667 GROSS	\$16,600
1,667 GROSS	\$4,800
139 gross	\$10,400
	\$171,000

Transaction 11. — Receive Raw Materials

NET SALES	\$	-
COST OF GOODS SOLD		-
GROSS MARGIN	•	-
SALES & MARKETING		-
RESEARCH & DEVELOPMENT		-
GENERAL & ADMINISTRATIVE		-
OPERATING EXPENSE		-
INCOME FROM OPERATIONS		-
NET INTEREST INCOME		-
INCOME TAXES		-
NET INCOME	\$	-

Income Statement

BEGINNING CASH BALANCE	\$ -
CASH RECEIPTS	-
CASH DISBURSEMENTS	-
CASH FLOW FROM OPERATIONS	-
PP&E PURCHASE	-
NET BORROWINGS	-
INCOME TAXES PAID	-
SALE OF CAPITAL STOCK	-
ENDING CASH BALANCE	\$ -

Cash Flow Statement

	CASH	\$ -
	ACCOUNTS RECEIVABLE	-
	INVENTORIES	332,400
	PREPAID EXPENSES	-
əts	CURRENT ASSETS	332,400
Assets	OTHER ASSETS	-
Q	FIXED ASSETS @ COST	-
	ACCUMULATED DEPRECIATION	-
	NET FIXED ASSETS	-
_	TOTAL ASSETS	332,400
		•



>	ACCOUNTS PAYABLE	\$ 332,400
Equity	ACCRUED EXPENSES	-
4	CURRENT PORTION OF DEBT	
	INCOME TAXES PAYABLE	-
∞ŏ	CURRENT LIABILITIES	332,400
Liabilities	LONG-TERM DEBT	
Ħ	CAPITAL STOCK	-
ᇴ	RETAINED EARNINGS	-
Ė	SHAREHOLDERS' EQUITY	-
	TOTAL LIABILITIES & EQUITY	\$ 332,400

Inventory Valuation Worksheet	RAW MATERIAL	WORK IN PROCESS	FINISHED GOODS
INVENTORY VALUES AT STARTUP	\$0	\$0	\$0
A. Receive labels (T10)	\$20,000	\$0	\$0
B. Receive 2 months' supply of other raw materials (T11)	\$332,400	\$0	\$0
INVENTORY SUBTOTALS AFTER THIS TRANSACTION	\$352,400	\$0	\$0
	TOTAL INVENTORY \$352		\$352,400

Transaction 12. - Start Production

NET SALES	\$	-
COST OF GOODS SOLD		-
GROSS MARGIN	·	-
SALES & MARKETING		-
RESEARCH & DEVELOPMENT		-
GENERAL & ADMINISTRATIVE		-
OPERATING EXPENSE	•	-
INCOME FROM OPERATIONS		-
NET INTEREST INCOME		-
INCOME TAXES		-
NET INCOME	\$	-

Income Statement

BEGINNING CASH BALANCE	\$ -	Cas
CASH RECEIPTS	-	•
CASH DISBURSEMENTS	9,020	
CASH FLOW FROM OPERATIONS	(9,020)	
PP&E PURCHASE	-	
NET BORROWINGS	-	
INCOME TAXES PAID	-	
SALE OF CAPITAL STOCK	-	
ENDING CASH BALANCES	\$ (9,020)	_

	CASH B	\$ (9,020)
	ACCOUNTS RECEIVABLE	-
	INVENTORIES	17,180
	PREPAID EXPENSES	-
ştş	CURRENT ASSETS	8,160
Assets	OTHER ASSETS	-
٩	FIXED ASSETS @ COST	-
	ACCUMULATED DEPRECIATION	-
	NET FIXED ASSETS	-
_	TOTAL ASSETS	8,160
_		

Ral	ance	Sheet	
Dai	ance	Sueer	

_	ACCOUNTS PAYABLE	\$	-	
Equity	ACCRUED EXPENSES		8,160	V
5	CURRENT PORTION OF DEBT		-	`
	INCOME TAXES PAYABLE			
∞ ŏ	CURRENT LIABILITIES		8,160	='
Liabilities	LONG-TERM DEBT		•	I
Ħ	CAPITAL STOCK		-	Ī
늄	RETAINED EARNINGS		-	
Ė	SHAREHOLDERS' EQUITY	·	-	_
_	TOTAL LIABILITIES & EQUITY	\$	8,160	_

Inventory Valuation Worksheet	RAW MATERIAL	WORK IN PROCESS	FINISHED GOODS
PRIOR INVENTORY VALUES	\$0	\$0	\$0
C. Move materials from raw materials to WIP.	(\$171,000)	\$171,000	\$0
D. Pay supervisor and workers for the month. See T9 .	\$0	\$17,180	\$0
INVENTORY SUBTOTALS AFTER THIS TRANSACTION	\$181,400	\$188,180	\$0
	TOTAL INVENTORY		\$369,580

Transaction 13. — Record Depreciation & Overhead

NET SALES	\$ -	7
COST OF GOODS SOLD	-	1
GROSS MARGIN	-	
SALES & MARKETING	-	
RESEARCH & DEVELOPMENT	-	
GENERAL & ADMINISTRATIVE	-	l
OPERATING EXPENSE	-	
INCOME FROM OPERATIONS	-	
NET INTEREST INCOME	-	7
INCOME TAXES]
NET INCOME	\$ -	_

Income Statement

BEGINNING CASH BALANCE	\$ -
CASH RECEIPTS	-
CASH DISBURSEMENTS	-
CASH FLOW FROM OPERATIONS	-
PP&E PURCHASE	-
NET BORROWINGS	-
INCOME TAXES PAID	-
SALE OF CAPITAL STOCK	-
ENDING CASH BALANCE	\$ -

Cash Flow Statement

	CASH	\$	-	
	ACCOUNTS RECEIVABLE		-	
	INVENTORIES		15,820	(
	PREPAID EXPENSES		-	•
şt	CURRENT ASSETS		15,820	
Assets	OTHER ASSETS		-	
∢	FIXED ASSETS @ COST		-	4
	ACCUMULATED DEPRECIATION		7,143	
	NET FIXED ASSETS		(7,143)	•
	TOTAL ASSETS		8,677	_
_				_
>	ACCOUNTS PAYABLE	\$	8,677	
ŧ	ACCRUED EXPENSES		-	
Equity	CURRENT PORTION OF DEBT		-	
	INCOME TAXES PAYABLE		-	
∞ઁ	CURRENT LIABILITIES	•	8,677	

CAPITAL STOCK
RETAINED EARNINGS
SHAREHOLDERS' EQUITY
TOTAL LIABILITIES & EQUITY



_	

Inventory Valuation Worksheet	RAW MATERIAL	WORK IN PROCESS	FINISHED GOODS
PRIOR INVENTORY VALUES	\$181,400	\$188,180	\$0
E. Book manufacturing depreciation for the month.	\$0	\$7,143	\$0
F. Book all other manufacturing overhead costs.	\$0	\$8,677	\$0
INVENTORY SUBTOTALS AFTER THIS TRANSACTION	\$181,400	\$204,000	\$0
	ТОТАІ	INVENTORY	\$385,400

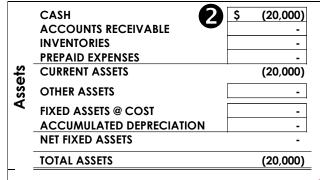
Transaction 14. — Pay for Materials

NET SALES	\$	-
COST OF GOODS SOLD		-
GROSS MARGIN		-
SALES & MARKETING		-
RESEARCH & DEVELOPMENT		-
GENERAL & ADMINISTRATIVE		-
OPERATING EXPENSE	•	-
INCOME FROM OPERATIONS		-
NET INTEREST INCOME		-
INCOME TAXES		-
NET INCOME	\$	-

Income Statement

BEGINNING CASH BALANCE	\$ -
CASH RECEIPTS	-
CASH DISBURSEMENTS	20,000
CASH FLOW FROM OPERATIONS	(20,000)
PP&E PURCHASE	-
NET BORROWINGS	-
INCOME TAXES PAID	-
SALE OF CAPITAL STOCK	-
ENDING CASH BALANCE	\$ (20,000)

Cash Flow Statement



>	ACCOUNTS PAYABLE	\$ (20,000)
\E	ACCRUED EXPENSES	-
Equity	CURRENT PORTION OF DEBT	-
	INCOME TAXES PAYABLE	-
∞ŏ	CURRENT LIABILITIES	(20,000)
Liabilities	LONG-TERM DEBT	-
Ħ	CAPITAL STOCK	-
ᇴ	RETAINED EARNINGS	
=	SHAREHOLDERS' EQUITY	-
	TOTAL LIABILITIES & EQUITY	\$ (20,000)
	· · · · · · · · · · · · · · · · · · ·	

Inventory Valuation Worksheet	RAW MATERIAL	WORK IN PROCESS	FINISHED GOODS
PRIOR INVENTORY VALUES	\$181,400	\$204,000	\$0
G. Pay for labels received on T10.	\$0	\$0	\$0
INVENTORY VALUES AFTER THIS TRANSACTION	\$181,400	\$204,000	\$0
	TOTAL INVENTORY		\$385,400

Transaction 15. — Move Inventory WIP to FG

NET SALES	\$ -
COST OF GOODS SOLD	-
GROSS MARGIN	-
SALES & MARKETING	-
RESEARCH & DEVELOPMENT	-
GENERAL & ADMINISTRATIVE	-
OPERATING EXPENSE	-
INCOME FROM OPERATIONS	-
NET INTEREST INCOME	-
INCOME TAXES	-
NET INCOME	\$ -

Income Statement

BEGINNING CASH BALANCE	\$	
CASH RECEIPTS		-
CASH DISBURSEMENTS		-
CASH FLOW FROM OPERATIONS	•	-
PP&E PURCHASE		-
NET BORROWINGS		-
INCOME TAXES PAID		-
SALE OF CAPITAL STOCK		-
ENDING CASH BALANCE	\$	-

Cash Flow Statement

	CASH	\$	-
	ACCOUNTS RECEIVABLE		-
	INVENTORIES		-
	PREPAID EXPENSES		-
şţs	CURRENT ASSETS		-
Assets	OTHER ASSETS		-
۷	FIXED ASSETS @ COST		-
	ACCUMULATED DEPRECIATION		-
	NET FIXED ASSETS		-
	TOTAL ASSETS		-
X	ACCOUNTS PAYABLE	\$	-
≒	ACCRUED EXPENSES		-
Equity	CURRENT PORTION OF DEBT		-
	INCOME TAXES PAYABLE		-
∞ŏ	CURRENT LIABILITIES		-
Liabilities &	LONG-TERM DEBT		-
Ħ	CAPITAL STOCK		-
g	RETAINED EARNINGS		-
Í	SHAREHOLDERS' EQUITY	•	-

TOTAL LIABILITIES & EQUITY

INVENTORY VALUATION WORKSHEET	RAW	WORK IN	FINISHED
INVENTURY VALUATION WORKSHEET	MATERIAL	PROCESS	GOODS
PRIOR INVENTORY VALUES	\$181,400	\$204,000	\$0
H. Move 19,500 cases from WIP into FG @ standard cost.	\$0	\$(198,900)	\$198,900
INVENTORY SUBTOTALS AFTER THIS TRANSACTION	\$181,400	\$204,000	\$0

\$385,400

TOTAL INVENTORY

Transaction 16. — Write Off Damaged Inventory

NET SALES	\$ -
COST OF GOODS SOLD	5,100
GROSS MARGIN	(5,100)
SALES & MARKETING	-
RESEARCH & DEVELOPMENT	-
GENERAL & ADMINISTRATIVE	-
OPERATING EXPENSE	-
INCOME FROM OPERATIONS	(5,100)
NET INTEREST INCOME	-
INCOME TAXES	-
 NET INCOME	\$ (5,100)

Income Statement

BEGINNING CASH BALANCE	\$	-
CASH RECEIPTS		-
CASH DISBURSEMENTS		-
CASH FLOW FROM OPERATIONS	•	-
PP&E PURCHASE		-
NET BORROWINGS		-
INCOME TAXES PAID		-
SALE OF CAPITAL STOCK		-
ENDING CASH BALANCE	\$	-

Cash Flow Statement

	CASH	\$	-	
	ACCOUNTS RECEIVABLE		-	
	INVENTORIES		(5,100)	
	PREPAID EXPENSES		-	
ş	CURRENT ASSETS		(5,100)	
Assets	OTHER ASSETS		-	
∢	FIXED ASSETS @ COST		-	
	ACCUMULATED DEPRECIATION		-	
	NET FIXED ASSETS	•	-	
	TOTAL ASSETS		(5,100)	
>	ACCOUNTS PAYABLE	\$	-	
ŧ	ACCRUED EXPENSES		-	
Equity	CURRENT PORTION OF DEBT		-	
ш	INCOME TAXES PAYABLE		-	
∞ŏ ∽	CURRENT LIABILITIES		-	
oilities	LONG-TERM DEBT		-	
Ħ	CAPITAL STOCK		-	
•				

RETAINED EARNINGS
SHAREHOLDERS' EQUITY
TOTAL LIABILITIES & EQUITY

Balance Sheet

(5,100)

\$

INVENTORY VALUATION WORKSHEET	RAW MATERIAL	WORK IN PROCESS	FINISHED GOODS
PRIOR INVENTORY VALUES	\$181,400	\$5,100	\$198,900
I. Scrap 500 cases of applesauce from WIP inventory.	\$0	\$(5,100)	\$0
INVENTORY VALUES AFTER THIS TRANSACTION	\$181,400	\$0	\$198,900
	TOTAL INVENTORY		\$380,300

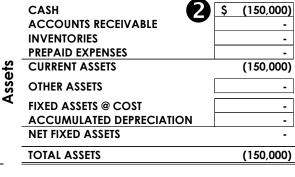
Transaction 17. — Pay for Raw Material

	NET SALES	\$ -	٦
	COST OF GOODS SOLD	-	
_	GROSS MARGIN	-	
	SALES & MARKETING	-	7
	RESEARCH & DEVELOPMENT	-	1
	GENERAL & ADMINISTRATIVE	-	
	OPERATING EXPENSE	-	
	INCOME FROM OPERATIONS	-	
	NET INTEREST INCOME	-	1
	INCOME TAXES	-	
_	NET INCOME	S -	_

Income Statement

BEGINNING CASH BALANCE	\$	-
CASH RECEIPTS		-
CASH DISBURSEMENTS		150,000
CASH FLOW FROM OPERATIONS	•	(150,000)
PP&E PURCHASE		-
NET BORROWINGS		-
INCOME TAXES PAID		-
SALE OF CAPITAL STOCK		-
ENDING CASH BALANCES	\$	(150,000)

Cash Flow Statement



_	ACCOUNTS PAYABLE	\$ (150,000)
Equity	ACCRUED EXPENSES	-
5	CURRENT PORTION OF DEBT	-
	INCOME TAXES PAYABLE	-
∞ŏ	CURRENT LIABILITIES	(150,000)
Liabilities	LONG-TERM DEBT	-
Ħ	CAPITAL STOCK	-
8	RETAINED EARNINGS	-
Ž	SHAREHOLDERS' EQUITY	-
	TOTAL LIABILITIES & EQUITY	\$ (150,000)

Inventory Valuation Worksheet	RAW MATERIAL	WORK IN PROCESS	FINISHED GOODS
PRIOR INVENTORY VALUES	\$181,400	\$0	\$198,900
I. Scrap 500 cases of applesauce from WIP inventory.	\$0	\$0	\$0
INVENTORY VALUES AFTER THIS TRANSACTION	\$181,400	\$0	\$198,900

TOTAL INVENTORY

\$380,300

$Transaction\ 18.\ -$ Manufacture More Applesauce

NET SALES	\$	-
COST OF GOODS SOLD		1,530
GROSS MARGIN	•	(1,530)
SALES & MARKETING		-
RESEARCH & DEVELOPMENT		-
GENERAL & ADMINISTRATIVE		-
OPERATING EXPENSE		-
INCOME FROM OPERATIONS		(1,530)
NET INTEREST INCOME		-
INCOME TAXES		-
NET INCOME	\$	(1,530)

Income Statement

BEGINNING CASH BALANCE	\$ -
CASH RECEIPTS	-
CASH DISBURSEMENTS	9,020
CASH FLOW FROM OPERATIONS	(9,020)
PP&E PURCHASE	-
NET BORROWINGS	-
INCOME TAXES PAID	-
SALE OF CAPITAL STOCK	•
ENDING CASH BALANCES	\$ (9,020)

Cash Flow Statement

	CASH	\$ (9,020)
	ACCOUNTS RECEIVABLE	-
	INVENTORIES	197,670
	PREPAID EXPENSES	-
şt	CURRENT ASSETS	188,650
Assets	OTHER ASSETS	-
∢	FIXED ASSETS @ COST	-
	ACCUMULATED DEPRECIATION	7,143
	NET FIXED ASSETS	(7,143)
	TOTAL ASSETS	181,507
_		

s & Equity	ACCOUNTS PAYABLE ACCRUED EXPENSES CURRENT PORTION OF DEBT INCOME TAXES PAYABLE CURRENT LIABILITIES	\$ 174,877 8,160 - - 183,037	
Liabilities	CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY TOTAL LIABILITIES & EQUITY	\$ - (1,530) (1,530) 181,507	
- :			=

Transaction: Make entries in the Income Statement, Cash Flow State*ment*, and *Balance Sheet* as shown in the total column at below right. **Note**: For each separate worksheet entry (shown in columns K through Q below), the change in assets must always equal the change in liabilities.

•WORKSHEET ENTRY	K	L	M	N	0	P	Q	TOTALS	
							Ī		
COST OF GOODS SOLD							\$1,530	\$1,530	l
CASH DISBURSEMENTS			\$9,020					\$9,020	
									ı
CASH			\$(9,020)					\$(9,020)	
INVENTORIES	\$166,200		\$17,180	\$7,143	\$8,677		\$(1,530)	\$197,670	
ACCUM. DEPRECIATION				\$7,143				\$(7,143)	
CHANGE IN ASSETS	\$166,200	\$0	\$8,160	\$0	\$8,677	\$0	\$(1,530)	\$181,507	•
									1
ACCOUNTS PAYABLE	\$166,200				\$8,677			\$174,877	
ACCRUED EXPENSES			\$8,160					\$8,160	
RETAINED EARNINGS							\$(1,530)	\$(1,530)	
CHANGE IN LIABILITIES	\$166,200	\$0	\$8,160	\$0	\$8,677	\$0	\$(1,530)	\$181,507	4

Inventory Valuation Worksheet	RAW MATERIAL	WORK IN PROCESS	FINISHED GOODS
INVENTORY VALUES PRIOR TO THIS TRANSACTION	\$181,400	\$5,100	\$198,900
K. Receive a month's raw material supply less labels (T10)	\$166,200	\$0	\$0
L. Move a month's supply of raw materials into WIP. (T12)	\$(171,000)	\$171,000	\$0
M. Pay hourly workers/supervisor for another month. (T12)	\$0	\$17,180	\$0
N. Book manufacturing depreciation for the month. (T13)	\$0	\$7,143	\$0
O. Book "all other" mfg. overhead for another month. (T13)	\$0	\$8,677	\$0
P. Move 19,000 cases to finished goods @ standard cost. (T15)	\$0	\$(193,800)	\$193,800
Q. Scrap 150 cases from WIP. (T16)	\$0	\$(1,530)	\$0
INVENTORY VALUES AFTER THIS TRANSACTION	\$176,600	\$8,670	\$392,700
	тота	L INVENTORY	\$380,300

Transaction 19. — Produce Product Advertising

NET SALES S -
NEI SALES
COST OF GOODS SOLD -
GROSS MARGIN -
SALES & MARKETING 103,250
RESEARCH & DEVELOPMENT -
GENERAL & ADMINISTRATIVE -
OPERATING EXPENSE 103,250
INCOME FROM OPERATIONS (103,250)
NET INTEREST INCOME -
INCOME TAXES -
NET INCOME \$ (103,250)

Income Statement



BEGINNING CASH BALANCE	\$	-
CASH RECEIPTS		-
CASH DISBURSEMENTS		-
CASH FLOW FROM OPERATIONS	•	-
PP&E PURCHASE		-
NET BORROWINGS		-
INCOME TAXES PAID		-
SALE OF CAPITAL STOCK		-
ENDING CASH RALANCES	\$	_

Cash Flow Statement

Assets	CASH ACCOUNTS RECEIVABLE INVENTORIES PREPAID EXPENSES CURRENT ASSETS OTHER ASSETS FIXED ASSETS @ COST ACCUMULATED DEPRECIATION NET FIXED ASSETS TOTAL ASSETS	\$ - - - - - -	
_	TOTAL ASSETS	•	

>	ACCOUNTS PAYABLE	\$ 103,250	l
=	ACCRUED EXPENSES	-	
Equity	CURRENT PORTION OF DEBT	-	
	INCOME TAXES PAYABLE	-	
∞ŏ	CURRENT LIABILITIES	103,250	
Liabilities	LONG-TERM DEBT	-	
Ĭ	CAPITAL STOCK	-	
ᇴ	RETAINED EARNINGS	(103,250)	
=	SHAREHOLDERS' EQUITY	(103,250)	
	TOTAL LIABILITIES & EQUITY	\$ -	_
_			_

${\bf Comparative\,Apple sauce\,Prices\,in\,our\,Market}$

	MANUFACTURER'S SELLING PRICE Base Price	WHOLESALER'S SELLING PRICE Plus 15% over manufacturer's price	RETAILER'S SELLING PRICE Plus 25% over wholesaler's price
% OF MFG'S SELLING PRICE	100%	115%	143%
% OF RETAILER'S SELLING PRICE	70%	80%	100%
BRAND A	\$15.21	\$17.49	\$21.86
BRAND B	\$15.40	\$17.71	\$22.14
BRAND C	\$16.58	\$19.07	\$23.84
APPLESEED ENTERPRISES' BRAND	\$15.90	\$18.29	\$22.86

Appleseed Enterprises Proforma Annual Costs and Expenses at Various Projected Production Volumes

VARIABLE	TOTAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL	ANNUAL
COST	FIXED	TOTALS	TOTALS	TOTALS	TOTALS	TOTALS
		@ ZERO	@ 5,000	@ 10,000	@ 15,000	@ 20,000
PER	COST PER	CASES PER				
CASE	YEAR	MONTH	MONTH	MONTH	MONTH	MONTH

Total Annual Variable Costs at Several Production Volumes

+ MATERIAL COSTS	\$8.550	_
+ DIRECT LABOR	\$0.615	
+ BROKER COM.	\$0.318	_
= TOTAL ANNUAL VARIABLE COSTS	\$9.483	

\$0	\$513,000	\$1,026,000	\$1,539,000	\$2,052,000
\$0	\$36,900	\$73,800	\$110,700	\$147,600
\$0	\$19,080	\$38,160	\$57,240	\$76,320
\$0	\$568,980	\$1,137,960	\$1,706,940	\$2,275,920

Total Annual Fixed Costs (no change with increasing production volume)

+ MFG. SUPERVISOR		\$58,650
+ DEPRECIATION		\$85,714
+ ALL OTHER MFG.	=	\$104,124
+ SG&A SALARIES		\$251,160
+ INTEREST	=	\$100,000
+ MARKETING	=	\$223,250
= TOTAL ANNUAL FIXED COSTS	=	\$822,898

Total fixed costs are the same at all production levels. That is why they are called "fixed costs." These fixed costs do not change if you make more or if you make less product.

Profit & Loss Statements at Several Production Volumes

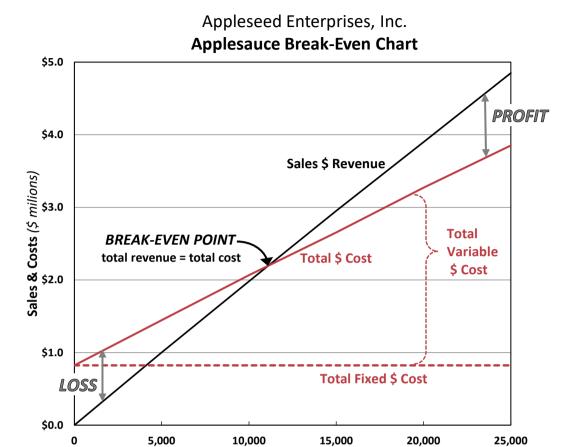
+ ANNUAL REVENUE @ \$15.90 PER CASE

- TOTAL ANNUAL VARIABLE COSTS

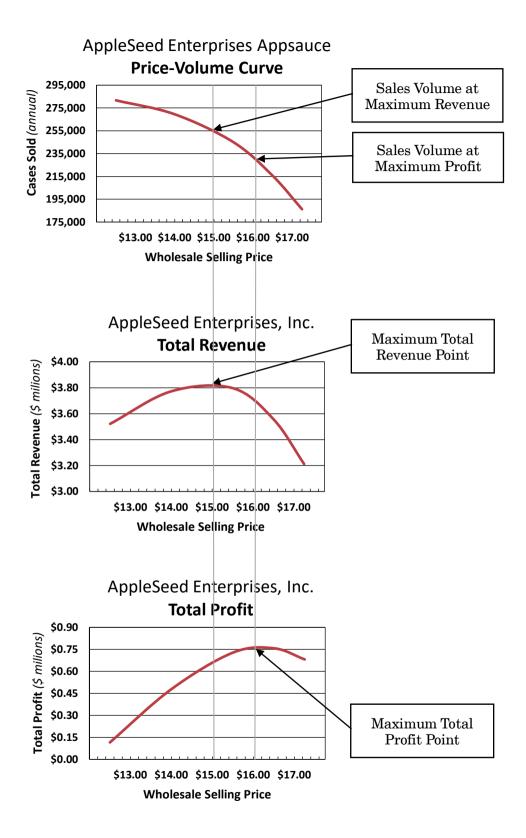
- TOTAL ANNUAL FIXED COSTS

= TOTAL ANNUAL PROFIT (LOSS)

0	\$954,000	\$1,908,000	\$2,862,000	\$3,816,000
0	\$568,980	\$1,137,960	\$1,706,940	\$2,275,920
\$822,898	\$822,898	\$822,898	\$822,898	\$822,898
\$(822,898)	\$(437,878)	\$(52,858)	\$332,162	\$717,182



Monthly Case Production



Transaction 20. — Ship 1,000 Cases of Applesauce

NET SALES	\$ 15,900	Income Statement
COST OF GOODS SOLD	10,200	(3) B
GROSS MARGIN	5,700	
SALES & MARKETING	318	2 A
RESEARCH & DEVELOPMENT		
GENERAL & ADMINISTRATIVE		
OPERATING EXPENSE	318	_
INCOME FROM OPERATIONS	5,382	
NET INTEREST INCOME		
INCOME TAXES		
NET INCOME	\$ 5,382	=

BEGINNING CASH BALANCE	\$ -
CASH RECEIPTS	
CASH DISBURSEMENTS	
CASH FLOW FROM OPERATIONS	-
PP&E PURCHASE	
NET BORROWINGS	
INCOME TAXES PAID	
SALE OF CAPITAL STOCK	
ENDING CASH BALANCE	\$ -

Cash Flow Statement

Assets	CASH ACCOUNTS RECEIVABLE INVENTORIES PREPAID EXPENSES CURRENT ASSETS OTHER ASSETS	15,900 (10,200) 5,700	
⋖	FIXED ASSETS @ COST ACCUMULATED DEPRECIATION NET FIXED ASSETS	-	! _
	TOTAL ASSETS	5,700	_
>	ACCOUNTS PAYABLE	\$ -	
Equity	ACCRUED EXPENSES	318	2
5	CURRENT PORTION OF DEBT		
	INCOME TAXES PAYABLE		
∞ઁ	CURRENT LIABILITIES	318	
ties	LONG-TERM DEBT		

CAPITAL STOCK

RETAINED EARNINGS
SHAREHOLDERS' EQUITY
TOTAL LIABILITIES & EQUITY

Balance Sheet

\$

Inventory Valuation Worksheet	RAW MATERIAL	WORK IN PROCESS	FINISHED GOODS
PRIOR INVENTORY VALUES FROM	\$176,600	\$8,670	\$392,700
R. Ship 1,000 cases of applesauce at \$10.20 standard cost/vase.	\$0	\$0	\$(10,200)
INVENTORY SUBTOTALS AFTER THIS TRANSACTION	\$176,600	\$8,670	\$382,500
	TO	TAL INVENTORY	\$567.770

Transaction 21. — Receive an Order **Income Statement NET SALES** \$ **COST OF GOODS SOLD GROSS MARGIN SALES & MARKETING RESEARCH & DEVELOPMENT GENERAL & ADMINISTRATIVE OPERATING EXPENSE INCOME FROM OPERATIONS NET INTEREST INCOME INCOME TAXES NET INCOME** \$ **Cash Flow Statement BEGINNING CASH BALANCE** \$ CASH RECEIPTS **CASH DISBURSEMENTS CASH FLOW FROM OPERATIONS PP&E PURCHASE NET BORROWINGS INCOME TAXES PAID** SALE OF CAPITAL STOCK **ENDING CASH BALANCE** \$ **Balance Sheet** CASH \$ **ACCOUNTS RECEIVABLE INVENTORIES** PREPAID EXPENSES **CURRENT ASSETS** OTHER ASSETS **FIXED ASSETS @ COST ACCUMULATED DEPRECIATION NET FIXED ASSETS** TOTAL ASSETS **ACCOUNTS PAYABLE ACCRUED EXPENSES CURRENT PORTION OF DEBT INCOME TAXES PAYABLE CURRENT LIABILITIES LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS**

\$

SHAREHOLDERS' EQUITY
TOTAL LIABILITIES & EQUITY

Transaction 22. — Ship 15,000 Cases of Applesauce

NET SALES	\$ 234,900	
COST OF GOODS SOLD	153,000	(2
GROSS MARGIN	81,900	J
SALES & MARKETING	4,698	(3
RESEARCH & DEVELOPMENT		9
GENERAL & ADMINISTRATIVE	-	
OPERATING EXPENSE	4,698	_
INCOME FROM OPERATIONS	77,202	
NET INTEREST INCOME	-	
INCOME TAXES	-	
NET INCOME	\$ 77,202	_

Income Statement

Cash Flow	Statement

BEGINNING CASH BALANCE	\$ -
CASH RECEIPTS	-
CASH DISBURSEMENTS	-
CASH FLOW FROM OPERATIONS	-
PP&E PURCHASE	-
NET BORROWINGS	-
INCOME TAXES PAID	-
SALE OF CAPITAL STOCK	-
ENDING CASH BALANCES	\$ -

234,900 **ACCOUNTS RECEIVABLE** (153,000) **INVENTORIES** PREPAID EXPENSES 81,900 **CURRENT ASSETS OTHER ASSETS FIXED ASSETS @ COST ACCUMULATED DEPRECIATION NET FIXED ASSETS TOTAL ASSETS** 81,900

	ACCOUNTS PAYABLE	\$ -	
Equity	ACCRUED EXPENSES	4,698	(
9	CURRENT PORTION OF DEBT	-	
	INCOME TAXES PAYABLE	-	
∞ઁ	CURRENT LIABILITIES	4,698	•
Liabilities	LONG-TERM DEBT]
Ħ	CAPITAL STOCK	-	
늄	RETAINED EARNINGS	77,202	(4
<u> </u>	SHAREHOLDERS' EQUITY	77,202	_
	TOTAL LIABILITIES & EQUITY	\$ 81,900	_



Inventory Valuation Worksheet	RAW MATERIAL	WORK IN PROCESS	FINISHED GOODS
PRIOR INVENTORY VALUES	\$176,600	\$8,670	\$382,500
S. Ship 15,000 cases of applesauce at \$10.20 standard cost.	\$0	\$0	\$(153,000)
INVENTORY VALUES AFTER THIS TRANSACTION	\$176,600 \$8,670 \$229,5		\$229,500
	TOTAL INVENTORY		\$414,770

Transaction 23. — Receive Payment

NET SALES	\$	-
COST OF GOODS SOLD		-
GROSS MARGIN	•	-
SALES & MARKETING		-
RESEARCH & DEVELOPMENT		-
GENERAL & ADMINISTRATIVE		-
OPERATING EXPENSE		-
INCOME FROM OPERATIONS		-
NET INTEREST INCOME		-
INCOME TAXES		-
NET INCOME	\$	-

Income Statement

BEGINNING CASH BALANCE	\$ -	
CASH RECEIPTS	234,900	١,
CASH DISBURSEMENTS	4,698	
CASH FLOW FROM OPERATIONS	230,202	
PP&E PURCHASE	-	
NET BORROWINGS	-	
INCOME TAXES PAID	-	
SALE OF CAPITAL STOCK		
ENDING CASH BALANCE	\$ 230,202	
		_

Cash Flow	Statement
2 A	
<u>-</u>	

CASH ACCOUNTS RECEIVABLE INVENTORIES PREPAID EXPENSES CURRENT ASSETS OTHER ASSETS FIXED ASSETS © COST ACCUMULATED DEPRECIATION NET FIXED ASSETS TOTAL ASSETS CURRENT PORTION OF DEBT INCOME TAXES PAYABLE CURRENT LIABILITIES LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY TOTAL LIABILITIES & EQUITY TOTAL LIABILITIES & EQUITY \$ 230,202 (234,900) B B B B B B B B B B B B B B B B B B				
ACCOUNTS RECEIVABLE INVENTORIES PREPAID EXPENSES CURRENT ASSETS OTHER ASSETS FIXED ASSETS @ COST ACCUMULATED DEPRECIATION NET FIXED ASSETS TOTAL ASSETS ACCOUNTS PAYABLE ACCRUED EXPENSES CURRENT PORTION OF DEBT INCOME TAXES PAYABLE CURRENT LIABILITIES LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY 1 B (234,900) (4,698) (4,698) (4,698) 2 B		CASH (3)	\$ 230,202	Balance Sheet
INVENTORIES PREPAID EXPENSES CURRENT ASSETS OTHER ASSETS FIXED ASSETS @ COST ACCUMULATED DEPRECIATION NET FIXED ASSETS TOTAL ASSETS ACCOUNTS PAYABLE ACCRUED EXPENSES CURRENT PORTION OF DEBT INCOME TAXES PAYABLE CURRENT LIABILITIES LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY - INVENTORIES		ACCOUNTS RECEIVABLE	(234,900)	
CURRENT ASSETS OTHER ASSETS FIXED ASSETS FIXED ASSETS OTHER ASSETS FIXED ASSETS FIXED ASSETS TOTAL ASSETS ACCUMULATED DEPRECIATION NET FIXED ASSETS TOTAL ASSETS ACCOUNTS PAYABLE ACCRUED EXPENSES CURRENT PORTION OF DEBT INCOME TAXES PAYABLE CURRENT LIABILITIES LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY - CURRENT ASSETS (4,698) ACCOUNTS PAYABLE ACCRUED EXPENSES 4,698 4,698 CURRENT LIABILITIES A,698 CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY -		INVENTORIES	-	
ACCUMULATED DEPRECIATION NET FIXED ASSETS TOTAL ASSETS ACCOUNTS PAYABLE ACCRUED EXPENSES CURRENT PORTION OF DEBT INCOME TAXES PAYABLE CURRENT LIABILITIES LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY		PREPAID EXPENSES	-	
ACCUMULATED DEPRECIATION NET FIXED ASSETS TOTAL ASSETS ACCOUNTS PAYABLE ACCRUED EXPENSES CURRENT PORTION OF DEBT INCOME TAXES PAYABLE CURRENT LIABILITIES LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY	şt	CURRENT ASSETS	(4,698)	
ACCUMULATED DEPRECIATION NET FIXED ASSETS TOTAL ASSETS ACCOUNTS PAYABLE ACCRUED EXPENSES CURRENT PORTION OF DEBT INCOME TAXES PAYABLE CURRENT LIABILITIES LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY	SSE	OTHER ASSETS	-	
NET FIXED ASSETS TOTAL ASSETS ACCOUNTS PAYABLE ACCRUED EXPENSES CURRENT PORTION OF DEBT INCOME TAXES PAYABLE CURRENT LIABILITIES LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY - (4,698) B 4,698 4,698 - CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY	٩	FIXED ASSETS @ COST	-	
ACCOUNTS PAYABLE ACCRUED EXPENSES CURRENT PORTION OF DEBT INCOME TAXES PAYABLE CURRENT LIABILITIES LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY ACCOUNTS PAYABLE \$ 4,698 4,698 4,698		ACCUMULATED DEPRECIATION	-	
ACCOUNTS PAYABLE ACCRUED EXPENSES CURRENT PORTION OF DEBT INCOME TAXES PAYABLE CURRENT LIABILITIES LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY ACCOUNTS PAYABLE 4,698 4,698 4,698		NET FIXED ASSETS	-	
ACCRUED EXPENSES CURRENT PORTION OF DEBT INCOME TAXES PAYABLE CURRENT LIABILITIES LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY A 698 C 7 C 8 C 8 C 9 C 9 C 9 C 9 C 9 C 9		TOTAL ASSETS	(4,698)	=
ACCRUED EXPENSES CURRENT PORTION OF DEBT INCOME TAXES PAYABLE CURRENT LIABILITIES LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY A 698 C 7 C 8 C 8 C 9 C 9 C 9 C 9 C 9 C 9				
CURRENT LIABILITIES 4,698 LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY -	>	ACCOUNTS PAYABLE		6 -
CURRENT LIABILITIES 4,698 LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY -	≒		4,698	Z B
CURRENT LIABILITIES 4,698 LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY -	9		-	
LONG-TERM DEBT CAPITAL STOCK RETAINED EARNINGS SHAREHOLDERS' EQUITY			-	
- CHARLIFOLDERO EQUIT		CURRENT LIABILITIES	4,698	
- CHARLIFOLDERO EQUIT	# E	LONG-TERM DEBT	-	
- CHARLIFOLDERO EQUIT	I≅	CAPITAL STOCK	-	
- CHARLIFOLDERO EQUIT	g	RETAINED EARNINGS	-	_
TOTAL LIABILITIES & EQUITY \$ 4,698	=	SHAREHOLDERS' EQUITY	-	_
L ====================================		TOTAL LIABILITIES & EQUITY	\$ 4,698	=

Transaction 24. — Write Off Shipment as a Bad Debt!

NET SALES	\$	-	Income Statement
COST OF GOODS SOLD		-	
GROSS MARGIN		-	_
SALES & MARKETING		(318)	2 A
RESEARCH & DEVELOPMENT			9/1
GENERAL & ADMINISTRATIVE		15,900	
OPERATING EXPENSE	·	15,582	
INCOME FROM OPERATIONS		(15,582)	
NET INTEREST INCOME		-	
INCOME TAXES		-	
NET INCOME	\$	(15,582)	-

BEGINNING CASH BALANCE	\$	-
CASH RECEIPTS		-
CASH DISBURSEMENTS		-
CASH FLOW FROM OPERATIONS	•	-
PP&E PURCHASE		-
NET BORROWINGS		-
INCOME TAXES PAID		-
SALE OF CAPITAL STOCK		-
ENDING CASH BALANCE	\$	-

Cash Flow Statement

	CASH	\$ -
	ACCOUNTS RECEIVABLE	(15,900)
	INVENTORIES	-
	PREPAID EXPENSES	-
ts.	CURRENT ASSETS	(15,900)
Assets	OTHER ASSETS	-
⋖	FIXED ASSETS @ COST	-
	ACCUMULATED DEPRECIATION	-
	NET FIXED ASSETS	-
	TOTAL ASSETS	(15,900)
	A COCULITY DAYABLE	•

	ACCOUNTS PAYABLE	\$ 	
Equity	ACCRUED EXPENSES	(318)	В
9	CURRENT PORTION OF DEBT		
	INCOME TAXES PAYABLE	-	
જ	CURRENT LIABILITIES	(318)	
Liabilities	LONG-TERM DEBT	-	
ቜ	CAPITAL STOCK		
늄	RETAINED EARNINGS	(15,582) (3)	
Ė	SHAREHOLDERS' EQUITY	(15,582)	
	TOTAL LIABILITIES & EQUITY	\$ (15,900)	

Transaction 25. — Pay Insurance Premum

NET SALES	\$ -	
COST OF GOODS SOLD	-	
GROSS MARGIN	-	_
SALES & MARKETING	-	
RESEARCH & DEVELOPMENT	-	
GENERAL & ADMINISTRATIVE	6,500	12
OPERATING EXPENSE	6,500	
INCOME FROM OPERATIONS	(6,500)	
NET INTEREST INCOME	-	
INCOME TAXES	-	
NET INCOME	\$ (6,500)	_

Cash Flow Statement

Income Statement

BEGINNING CASH BALANCE	\$ -
CASH RECEIPTS	-
CASH DISBURSEMENTS	26,000
CASH FLOW FROM OPERATIONS	(26,000)
PP&E PURCHASE	-
NET BORROWINGS	-
INCOME TAXES PAID	-
SALE OF CAPITAL STOCK	-
ENDING CASH BALANCES	\$ (26,000)

	CASH B	\$ (26,000)]
	ACCOUNTS RECEIVABLE	-	
	INVENTORIES	-	
	PREPAID EXPENSES	19,500	(3)
) ts	CURRENT ASSETS	(6,500)	
Assets	OTHER ASSETS	-	
∢	FIXED ASSETS @ COST	-	
	ACCUMULATED DEPRECIATION	-	
	NET FIXED ASSETS	-	
_ :	TOTAL ASSETS	(6,500)	_ _
			,
>	ACCOUNTS PAYABLE	\$ -	
#	ACCRUED EXPENSES	-	(3)
Equity	CURRENT PORTION OF DEBT	-	
ш	INCOME TAXES PAYABLE	-	
∞ ′	CURRENT LIABILITIES	<u>-</u>	•
Liabilities	LONG-TERM DEBT	-	
Ħ	CAPITAL STOCK	-	
ਰ	RETAINED EARNINGS	(6,500)	(4)
≔	SHAREHOLDERS' EQUITY	(6,500)	

TOTAL LIABILITIES & EQUITY

Balance Sheet



(6,500)

\$

$Transaction\ 26.\ -Pay\ Debt\ Principal\ and\ Interest$

NET SALES	\$ -	Income Statement
COST OF GOODS SOLD		
GROSS MARGIN	-	_
SALES & MARKETING	-	
RESEARCH & DEVELOPMENT		
GENERAL & ADMINISTRATIVE		_
OPERATING EXPENSE	-	
NCOME FROM OPERATIONS	-	_
NET INTEREST INCOME	(25,000)	(3) A
INCOME TAXES	-	
NET INCOME	\$ (25,000)	_

BEGINNING CASH BALANCE	\$	-	Cash Flow Statement
CASH RECEIPTS		-	
CASH DISBURSEMENTS		25,000	ab B
CASH FLOW FROM OPERATIONS	•	(25,000)	
PP&E PURCHASE		-	
NET BORROWINGS		(25,000)	ab A
INCOME TAXES PAID		-	
SALE OF CAPITAL STOCK			
ENDING CASH BALANCES	\$	(50,000)	_

	CASH	\$	(50,000)	Balance Sheet
	ACCOUNTS RECEIVABLE		-	
	INVENTORIES		-	
	PREPAID EXPENSES		-	
s	CURRENT ASSETS		(50,000)	
Assets	OTHER ASSETS		-	
⋖	FIXED ASSETS @ COST		-	
	ACCUMULATED DEPRECIATION		-	
	NET FIXED ASSETS		-	
	TOTAL ASSETS		(50,000)	=
>	ACCOUNTS PAYABLE	\$	-	
l≒	ACCRUED EXPENSES		-	
Equity	CURRENT PORTION OF DEBT		-	
	INCOME TAXES PAYABLE		-	
∞ ∞	CURRENT LIABILITIES		-	
Liabilities	LONG-TERM DEBT		(25,000)	2
Ę	CAPITAL STOCK		-	
믕	RETAINED EARNINGS		(25,000)	(3) B
Ë	SHAREHOLDERS' EQUITY	•	(25,000)	
	TOTAL LIABILITIES & EQUITY	\$	(50,000)	_

Transaction 27. — Pay Payroll Taxes and Benefits

NET SALES	\$ -
COST OF GOODS SOLD	-
GROSS MARGIN	-
SALES & MARKETING	-
RESEARCH & DEVELOPMENT	-
GENERAL & ADMINISTRATIVE	
OPERATING EXPENSE	-
INCOME FROM OPERATIONS	-
NET INTEREST INCOME	-
INCOME TAXES	-
NET INCOME	\$

Income Statement

BEGINNING CASH BALANCE	\$	-	Cas
CASH RECEIPTS		-	
CASH DISBURSEMENTS		18,480	
CASH FLOW FROM OPERATIONS	•	(18,480)	
PP&E PURCHASE		-	
NET BORROWINGS		-	
INCOME TAXES PAID		-	
SALE OF CAPITAL STOCK		-	
ENDING CASH BALANCE	\$	(18,480)	_

Cash Flow Statement

	CASH B	\$ (18,480)
	ACCOUNTS RECEIVABLE	-
	INVENTORIES	-
	PREPAID EXPENSES	-
ets	CURRENT ASSETS	(18,480)
Assets	OTHER ASSETS	-
Q	FIXED ASSETS @ COST	-
	ACCUMULATED DEPRECIATION	-
	NET FIXED ASSETS	-
_	TOTAL ASSETS	(18,480)

Pal	onaa	Sheet
КЯІ	ance.	Sheel

_	ACCOUNTS PAYABLE	\$ -
Equity	ACCRUED EXPENSES	(18,480)
9	CURRENT PORTION OF DEBT	-
	INCOME TAXES PAYABLE	-
ૐ	CURRENT LIABILITIES	(18,480)
Liabilities	LONG-TERM DEBT	-
Ħ	CAPITAL STOCK	-
ᇴ	RETAINED EARNINGS	-
=	SHAREHOLDERS' EQUITY	-
-	TOTAL LIABILITIES & EQUITY	\$ (18,480)

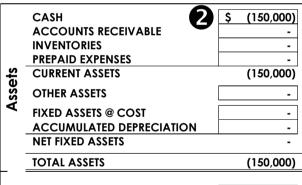
$Transaction\ 28.\ -Pay\ Suppliers$

NET SALES	\$ -
COST OF GOODS SOLD	-
GROSS MARGIN	-
SALES & MARKETING	-
RESEARCH & DEVELOPMENT	-
GENERAL & ADMINISTRATIVE	-
OPERATING EXPENSE	-
INCOME FROM OPERATIONS	-
NET INTEREST INCOME	-
INCOME TAXES	-
NET INCOME	\$ -

Income Statement

BEGINNING CASH BALANCE	\$ -
CASH RECEIPTS	-
CASH DISBURSEMENTS	150,000
CASH FLOW FROM OPERATIONS	(150,000)
PP&E PURCHASE	-
NET BORROWINGS	-
INCOME TAXES PAID	-
SALE OF CAPITAL STOCK	-
ENDING CASH BALANCE	\$ (150,000)

Cash Flow Statement



_	ACCOUNTS PAYABLE	\$ (150,000)
€	ACCRUED EXPENSES	-
Equity	CURRENT PORTION OF DEBT	-
	INCOME TAXES PAYABLE	-
જ	CURRENT LIABILITIES	(150,000)
Liabilities	LONG-TERM DEBT	-
Ħ	CAPITAL STOCK	-
엉	RETAINED EARNINGS	-
Ē	SHAREHOLDERS' EQUITY	-
	TOTAL LIABILITIES & EQUITY	\$ (150,000)

Transaction 29. — Fast-Forward Summary

NET SALES	\$	2,804,760	
COST OF GOODS SOLD		1,836,000	
GROSS MARGIN	•	968,760	
SALES & MARKETING		212,895	
RESEARCH & DEVELOPMENT		26,000	
GENERAL & ADMINISTRATIVE		162,900	
OPERATING EXPENSE	-	401,795	
INCOME FROM OPERATIONS		566,965	
NET INTEREST INCOME		(75,000)	
INCOME TAXES		-	
NET INCOME	\$	491,965	

Income Statement

	BEGINNING CASH BALANCE	s	
		_	
	CASH RECEIPTS		2,350,000
_	CASH DISBURSEMENTS		2,285,480
	CASH FLOW FROM OPERATIONS		64,520
	PP&E PURCHASE		
			<u>.</u>
	NET BORROWINGS		(75,000)
	INCOME TAXES PAID		-
	SALE OF CAPITAL STOCK		
-	ENDING CASH BALANCES	\$	(10,480)
_ =			. , ,

Cash Flow Statement

	CASH	\$ (10,480)
	ACCOUNTS RECEIVABLE	454,760
	INVENTORIES	-
	PREPAID EXPENSES	(19,500)
ş	CURRENT ASSETS	424,780
Assets	OTHER ASSETS	-
⋖	FIXED ASSETS @ COST	-
	ACCUMULATED DEPRECIATION	64,287
	NET FIXED ASSETS	(64,287)
	TOTAL ASSETS	360,493
>	ACCOUNTS PAYABLE	\$ (82,907)

ACCRUED EXPENSES

CURRENT PORTION OF DEBT

Balance Sheet

Liabilities & Equity

INCOME TAXES PAYABLE		-
CURRENT LIABILITIES	-	(56,472)
LONG-TERM DEBT		(75,000)
CAPITAL STOCK		-
RETAINED EARNINGS		491,965
SHAREHOLDERS' EQUITY		491,965
TOTAL LIABILITIES & EQUITY	\$	360,493

26,435

$Transaction \ 30. \ -Book \ Income \ Taxes \ Payable$

NET SALES	\$ -	Income Statement
COST OF GOODS SOLD	-	
GROSS MARGIN	-	_
SALES & MARKETING	-	
RESEARCH & DEVELOPMENT	-	
GENERAL & ADMINISTRATIVE	-	
OPERATING EXPENSE	-	
INCOME FROM OPERATIONS	-	
NET INTEREST INCOME	-	
INCOME TAXES	113,589	U A
NET INCOME	\$ (113,589)	

BEGINNING CASH BALANCE	\$ -
CASH RECEIPTS	-
CASH DISBURSEMENTS	-
CASH FLOW FROM OPERATIONS	-
PP&E PURCHASE	-
NET BORROWINGS	-
INCOME TAXES PAID	-
SALE OF CAPITAL STOCK	-
ENDING CASH BALANCES	\$ •

Cash Flow Statement

	CASH ACCOUNTS RECEIVABLE INVENTORIES PREPAID EXPENSES	\$ - - -
şts	CURRENT ASSETS	-
Assets	OTHER ASSETS	-
Ø	FIXED ASSETS @ COST	-
	ACCUMULATED DEPRECIATION	-
	NET FIXED ASSETS	-
	TOTAL ASSETS	-

_	ACCOUNTS PAYABLE	\$	-	
Equity	ACCRUED EXPENSES		-	
9	CURRENT PORTION OF DEBT		-	
	INCOME TAXES PAYABLE		113,589	
∞ŏ	CURRENT LIABILITIES		113,589	
Liabilities	LONG-TERM DEBT		-	
Ħ	CAPITAL STOCK		-	
늄	RETAINED EARNINGS		(113,589)) (
=	SHAREHOLDERS' EQUITY		(113,589))
_	TOTAL LIABILITIES & EQUITY	\$	-	
_	-			_

Transaction 31. — Book and Pay Dividend

NET SALES	\$ -
COST OF GOODS SOLD	-
GROSS MARGIN	-
SALES & MARKETING	-
RESEARCH & DEVELOPMENT	-
GENERAL & ADMINISTRATIVE	-
OPERATING EXPENSE	•
INCOME FROM OPERATIONS	-
NET INTEREST INCOME	-
INCOME TAXES	-
NET INCOME	\$

Income Statement

BEGINNING CASH BALANCE	\$	-	Cas
CASH RECEIPTS		-	
CASH DISBURSEMENTS		75,000	
CASH FLOW FROM OPERATIONS	-	(75,000)	
PP&E PURCHASE		-	
NET BORROWINGS		-	
INCOME TAXES PAID		-	
SALE OF CAPITAL STOCK		-	
ENDING CASH BALANCES	\$	(75,000)	_

Cash Flow Statement

	CASH B	\$ (75,000)	
	ACCOUNTS RECEIVABLE	-	
	INVENTORIES	-	
	PREPAID EXPENSES	-	
\$	CURRENT ASSETS	(75,000)	
Assets	OTHER ASSETS	-	
⋖	FIXED ASSETS @ COST	-	
	ACCUMULATED DEPRECIATION	-	
	NET FIXED ASSETS	-	
_	TOTAL ASSETS	(75,000)	- =
>	ACCOUNTS PAYABLE	\$ -	
≒	ACCRUED EXPENSES	-	
Equity	CURRENT PORTION OF DEBT	-	
ш	INCOME TAXES PAYABLE	-	
∞ŏ	CURRENT LIABILITIES	-	
Liabilities	LONG-TERM DEBT	-	
Ħ	CAPITAL STOCK	-	_
용	RETAINED EARNINGS	(75,000)	0
•=	SHAREHOLDERS' FOLLITY	(75 000)	•

TOTAL LIABILITIES & EQUITY

Balance Sheet



(75,000)

Appleseed Enterprises, Inc. — Financial Statements

\$ 3,055,560	100%
2,005,830	66%
1,049,730	34%
328,523	11%
26,000	1%
203,520	7 %
558,043	18%
491,687	16%
(100,000)	-3%
113,587	4%
\$ 278,100	9%
	2,005,830 1,049,730 328,523 26,000 203,520 558,043 491,687 (100,000) 113,587

Income Statement

BEGINNING CASH BALANCE	\$	0
CASH RECEIPTS		2,584,900
CASH DISBURSEMENTS		2,796,438
CASH FLOW FROM OPERATIONS	•	(211,538)
PP&E PURCHASE		1,750,000
NET BORROWINGS		900,000
INCOME TAXES PAID		0
SALE OF CAPITAL STOCK		1,550,000
ENDING CASH BALANCES	\$	488,462

Cash Flow Statement

	CASH	\$	488,462	16%
	ACCOUNTS RECEIVABLE		454,760	15%
	INVENTORIES		414,770	14%
	PREPAID EXPENSES		0	0%
ş	CURRENT ASSETS	•	1,357,992	45%
Assets	OTHER ASSETS		0	0%
٩	FIXED ASSETS @ COST		1,750,000	58%
	ACCUMULATED DEPRECIATION		78,573	3%
	NET FIXED ASSETS	•	1,671,427	55 %
	TOTAL ASSETS		3,029,419	100%
>	ACCOUNTS PAYABLE	\$	236,297	8%
ŧ	ACCRUED EXPENSES		26,435	1%
Equity	CURRENT PORTION OF DEBT		100,000	3%
ш	INCOME TAXES PAYABLE		113,587	4%
∞ŏ	CURRENT LIABILITIES		476,319	16%
Liabilities	LONG-TERM DEBT		800,000	26%
Ħ	CAPITAL STOCK		1,550,000	51%
귷	RETAINED EARNINGS		203,100	7 %
Ė	SHAREHOLDERS' EQUITY		1,753,100	58%
	TOTAL LIABILITIES & EQUITY	S	3.029.419	100%

[&]quot;Common Sized" statement analysis in red.

Alternative AppleSeed Enterprises Valuations VALUATION METHOD COMPANY VALUE

Book Value	\$1,753.100
Liquidation Value	\$504,807
Price-Earnings Multiple	\$3,337,200
Market Value	sell to whom?
Discounted Cash Flow	too complex!

AppleSeed Enterprises, Inc. Cash Ledger

	TRANSACTION NUMBER & DESCRIPTION		OUTGOING CASH (-)	ENDING CASH BALANCE (=)
	Beginning of period balance			\$50,000
T1.	Sell 150,000 shares at \$10 each	\$1,500,000		\$1,550,000
T2.	G&A payroll checks		\$3,370	\$1,546,630
Т3.	Borrowing to purchase building	\$1,000,000		\$2,546,630
T4.	Purchase building for \$1.5 million		\$1,500,000	\$1,046,630
T5.	SG&A payroll		\$7,960	\$1,038,670
Т6.	Pay payroll taxes to government		\$9,690	\$1,028,980
T7.	Make partial payment for machinery		\$125,000	\$903,980
Т8.	Make final payment for machinery		\$125,000	\$778,980
Т9.	Supervisor's payroll		\$2,720	\$776,260
T12.	Pay manufacturing payroll		\$9,020	\$767,240
T14.	Pay for jar labels		\$20,000	\$747,240
T17.	Partial payment to raw material suppliers		\$150,000	\$597,240
T18.	Pay manufacturing payroll		\$9,020	\$588,220
T23.	Receipts from customer, commission payment	\$234,900	\$4,698	\$818,422
T25.	Pay insurance premiums		\$26,000	\$792,422
T26.	Pay mortgage principal and interest		\$50,000	\$742,422
T27.	Pay payroll taxes and benefit premiums		\$18,480	\$723,942
T28.	Pay hungry suppliers		\$150,000	\$573,942
T29.	Nine months' summary transactions (net)		\$10,480	\$563,462
T31.	Dividend payment		\$75,000	\$488,462

AppleSeed Enterprises, Inc. Accounts Payable Ledger

	TRANSACTION NUMBER & DESCRIPTION		ACCOUNTS PAYABLE TOTAL
	Opening balance		\$0
T10.	Receive labels	\$20,000	\$20,000
T11.	Receive two months' raw materials	\$332,400	\$352,400
T13.	Book a month's "all other" mfg. expense	\$8,677	\$361,077
T14.	Pay for labels received in T10	\$(20,000)	\$341,077
T17.	Partial payment to raw material suppliers	\$(150,000)	\$191,077
T18l.	Receive additional month's raw materials	\$166,200	\$357,277
T18p.	Book another month's "all other" mfg. expense	\$8,677	\$365,954
T19.	Book advertising flier and T-shirt expense	\$103,250	\$469,204
T28.	Pay hungry suppliers	\$(150,000)	\$319,204
T29.	Nine months' summary transactions (net)	\$(82,907)	\$236,297

AppleSeed Enterprises, Inc. Inventory Ledger

TRANSACTION NUMBER & DESCRIPTION		BEGINNING INVENTORY	TRANSACTION AMOUNT	ENDING INVENTORY
	Opening balance			0
T10.	Receive applesauce jar labels	\$0	\$20,000	\$20,000
T11.	Receive two months' inventory	\$20,000	\$332,400	\$352,400
T12.	Pay manufacturing salaries	\$352,400	\$17,180	\$369,580
T13.	Book depreciation and other mfg. overhead	\$369,580	\$15,820	\$385,400
T16.	Scrap the value of 500 cases of applesauce	\$385,400	\$(5,100)	\$380,300
T18.	Mfg another month's worth of applesauce	\$380,300	\$197,670	\$577,970
T20.	Ship 1,000 cases of applesauce	\$577,970	\$(10,200)	\$567,770
T22.	Ship 15,000 cases of applesauce	\$567,770	\$(153,000)	\$414,770

AppleSeed Enterprises, Inc. Accrued Ledger

	TRANSACTION NUMBER & DESCRIPTION		ACCRUED EXPENSES TOTAL
	Opening balance		0
T2.	Payroll-associated taxes and benefits	\$2,860	\$2,860
T5.	Payroll-associated taxes and benefits	\$6,830	\$9,690
Т6.	Pay payroll taxes and associated premiums	\$(9,690)	\$0
Т9.	Payroll-associated taxes and benefits	\$2,160	\$2,160
T12.	Payroll-associated taxes and benefits	\$8,160	\$10,320
T18.	Payroll-associated taxes and benefits	\$8,160	\$18,480
T20.	Sales commission due	\$318	\$18,798
T22.	Sales commission due	\$4,698	\$23,496
T23.	Payment of sales commission	\$(4,698)	\$18,798
T24.	Reversal of sales commission due from T20 .	\$(318)	\$18,480
T27.	Pay payroll taxes, fringe benefit, premiums	\$(18,480)	\$0
T29.	Nine months' summary transactions (net)	\$26,435	\$26,435

AppleSeed Enterprises, Inc. Accounts Receivable Ledger

	TRANSACTION NUMBER & DESCRIPTION		ACCOUNTS RECEIVABLE TOTAL
	Opening balance		\$0
T20.	Applesauce sale - 1,000 cases @ \$15.90	\$15,900	\$15,900
T22.	Applesauce sale - 15,000 cases @ \$15.66	\$234,900	\$250,800
T23.	Payment received for T22	\$(234,900)	\$15,900
T24.	Bad debt from T20 - write off receivable	\$(15,900)	\$0
T29.	Nine months' summary transactions (net)	\$454,760	\$454,760

Appleseed Enterprises, Inc. — Financial Statements

NET SALES \$ 3,055,560 100% COST OF GOODS SOLD 2,005,830 66%
GROSS MARGIN 1,049,730 34% SALES & MARKETING 328,523 11% RESEARCH & DEVELOPMENT 26,000 1% GENERAL & ADMINISTRATIVE 203,520 7% OPERATING EXPENSE 558,043 18% INCOME FROM OPERATIONS 491,687 16% NET INTEREST INCOME (100,000) -3% INCOME TAXES 113,587 4%
SALES & MARKETING 328,523 11% RESEARCH & DEVELOPMENT 26,000 1% GENERAL & ADMINISTRATIVE 203,520 7% OPERATING EXPENSE 558,043 18% INCOME FROM OPERATIONS 491,687 16% NET INTEREST INCOME (100,000) -3% INCOME TAXES 113,587 4%
RESEARCH & DEVELOPMENT 26,000 1% GENERAL & ADMINISTRATIVE 203,520 7% OPERATING EXPENSE 558,043 18% INCOME FROM OPERATIONS 491,687 16% NET INTEREST INCOME (100,000) -3% INCOME TAXES 113,587 4%
GENERAL & ADMINISTRATIVE 203,520 7% OPERATING EXPENSE 558,043 18% INCOME FROM OPERATIONS 491,687 16% NET INTEREST INCOME (100,000) -3% INCOME TAXES 113,587 4%
OPERATING EXPENSE 558,043 18% INCOME FROM OPERATIONS 491,687 16% NET INTEREST INCOME (100,000) -3% INCOME TAXES 113,587 4%
INCOME FROM OPERATIONS
NET INTEREST INCOME (100,000) -3% INCOME TAXES 113,587 4%
INCOME TAXES 113,587 4%
NET INCOME \$ 278,100 9%

Income Statement

Set NET SALES at 100% for a Common Size Income Statement

		CASH	\$ 488,462	16%
		ACCOUNTS RECEIVABLE	454,760	15%
		INVENTORIES	414,770	14%
		PREPAID EXPENSES	0	0%
	ş	CURRENT ASSETS	1,357,992	45%
	Assets	OTHER ASSETS	0	0%
	⋖	FIXED ASSETS @ COST	1,750,000	58%
		ACCUMULATED DEPRECIATION	78,573	3%
		NET FIXED ASSETS	1,671,427	55%
		TOTAL ASSETS	3,029,419	100%
ı	_			

Balance Sheet

236,297 **ACCOUNTS PAYABLE** 8% **ACCRUED EXPENSES** 26,435 1% 100,000 **CURRENT PORTION OF DEBT** 3% **INCOME TAXES PAYABLE** 113,587 4% **CURRENT LIABILITIES** 476,319 16% **LONG-TERM DEBT** 800,000 26% **CAPITAL STOCK** 1,550,000 51% **RETAINED EARNINGS** 203,100 **7**% **SHAREHOLDERS' EQUITY** 1,753,100 58% **TOTAL LIABILITIES & EQUITY** \$ 3,029,419 100%

Set TOTAL ASSETS and TOTAL LIABILITIES & EQUITY at 100% for a Common Size Balance Sheet

Appleseed Enterprises, Inc. — Liquidity Ratios

	CASH	\$ 488,462	A	Balance Sheet
	ACCOUNTS RECEIVABLE	454,760	В	
	INVENTORIES	414,770		
	PREPAID EXPENSES	0		
<u>əts</u>	CURRENT ASSETS	1,357,992	C	
Assets	OTHER ASSETS	0		
Q	FIXED ASSETS @ COST	1,750,000		
	ACCUMULATED DEPRECIATION	78,573		
	NET FIXED ASSETS	1,671,427		
	TOTAL ASSETS	3,029,419		
>	ACCOUNTS PAYABLE	\$ 236,297		
ŧ	ACCRUED EXPENSES	26,435		
Equity	CURRENT PORTION OF DEBT	100,000		
Щ	INCOME TAXES PAYABLE	113,587		
8	CURRENT LIABILITIES	476,319	D	
Liabilities	LONG-TERM DEBT	800,000		
Ħ	CAPITAL STOCK	1,550,000		
ak	RETAINED EARNINGS	203,100		
Ë	SHAREHOLDERS' EQUITY	1,753,100		
	TOTAL LIABILITIES & EQUITY	\$ 3,029,419		

Current Ratio =
$$\frac{Current\ Assets}{Current\ Liabilities} = \frac{C}{D} = \frac{\$1,357,992}{\$476,319} = 2.9$$

Quick Ratio =
$$\frac{Cash + Receivables}{Shareholders'Equity} = \frac{A+B}{D} = \frac{\$488,462 + \$454,760}{\$476,319} = 2.0$$

Appleseed Enterprises, Inc. — Asset Management Ratios

	NET SALES	\$ 3,055,560	Α
	COST OF GOODS SOLD	2,005,830	В
	GROSS MARGIN	1,049,730	
	SALES & MARKETING	328,523	
	RESEARCH & DEVELOPMENT	26,000	
	GENERAL & ADMINISTRATIVE	203,520	
	OPERATING EXPENSE	558,043	
	INCOME FROM OPERATIONS	491,687	
	NET INTEREST INCOME	(100,000)	
	INCOME TAXES	113,587	
_	NET INCOME	\$ 278,100	

Income Statement

	CASH	\$ 488,462	
	ACCOUNTS RECEIVABLE	454,760	C
	INVENTORIES	414,770	D
	PREPAID EXPENSES	0	
sts	CURRENT ASSETS	1,357,992	
Assets	OTHER ASSETS	0	
⋖	FIXED ASSETS @ COST	1,750,000	
	ACCUMULATED DEPRECIATION	78,573	
	NET FIXED ASSETS	1,671,427	
	TOTAL ASSETS	3,029,419	E
_	ACCOUNTS PAYABLE	\$ 236,297	
€	ACCRUED EXPENSES	26,435	
Equity	CURRENT PORTION OF DEBT	100,000	
ш	INCOME TAXES PAYABLE	113,587	
<u>«۵</u>	CURRENT LIABILITIES	476,319	
Liabilities	LONG-TERM DEBT	800,000	
Ħ	CAPITAL STOCK	1,550,000	
ᅙ	RETAINED EARNINGS	203,100	
≔	SHAREHOLDERS' EQUITY	1,753,100	
	TOTAL LIABILITIES & EQUITY	\$ 3,029,419	_

Inventory Turn =
$$\frac{Cost\ of\ Goods\ Sold}{Inventory} = \frac{B}{D} = \frac{\$2,005,830}{\$414,770} = 4.8\ Turn$$

Asset Turn Ratio =
$$\frac{Annual \ Sales}{Assets} = \frac{A}{E} = \frac{\$3,055,560}{\$3,029,419} = 1.0 \ Turn$$

Receivable Days =
$$\frac{Receivables \times 365}{Annual Sales} = \frac{C \times 365}{A} = \frac{\$454,760 \times 365}{\$3,055,560} = 54 \text{ Days}$$

Appleseed Enterprises, Inc. — Profitability Ratios

NET SALES	\$ 3,055,560	Α
COST OF GOODS SOLD	2,005,830	В
GROSS MARGIN	1,049,730	
SALES & MARKETING	328,523	
RESEARCH & DEVELOPMENT	26,000	
GENERAL & ADMINISTRATIVE	203,520	
OPERATING EXPENSE	558,043	
INCOME FROM OPERATIONS	491,687	
NET INTEREST INCOME	(100,000)	
INCOME TAXES	113,587	
NET INCOME	\$ 278,100	C

Income Statement

	CASH	\$ 488,462	
	ACCOUNTS RECEIVABLE	454,760	
	INVENTORIES	414,770	
	PREPAID EXPENSES	0	
\$	CURRENT ASSETS	1,357,992	
Assets	OTHER ASSETS	0	
⋖	FIXED ASSETS @ COST	1,750,000	
	ACCUMULATED DEPRECIATION	78,573	
	NET FIXED ASSETS	1,671,427	
	TOTAL ASSETS	3,029,419	D
_	ACCOUNTS PAYABLE	\$ 236,297	
Ę	ACCRUED EXPENSES	26,435	
Equity	CURRENT PORTION OF DEBT	100,000	
	INCOME TAXES PAYABLE	113,587	
∞ ∞	CURRENT LIABILITIES	476,319	
Liabilities &	LONG-TERM DEBT	800,000	
i≣	CAPITAL STOCK	1,550,000	
g	RETAINED EARNINGS	203,100	
=	SHAREHOLDERS' EQUITY	1,753,100	E
	TOTAL LIABILITIES & EQUITY	\$ 3.029.419	_

Return on Assets =
$$\frac{Net\ Income}{Inventory} = \frac{B}{D} = \frac{\$251,883}{\$3,029,419} = 8\%$$

Return on Equity =
$$\frac{Net\ Income}{Shareholders'Equity} = \frac{A}{E} = \frac{\$251,883}{\$1,726,883} = 15\%$$

Return on Sales =
$$\frac{Net \ income}{Net \ Sales} = \frac{C}{A} = \frac{\$251,883}{\$3,055,560} = 8\%$$

Appleseed Enterprises, Inc. — Leverage Ratios

	_		
	CASH	\$ 488,462	Balance Sheet
	ACCOUNTS RECEIVABLE	454,760	
	INVENTORIES	414,770	
	PREPAID EXPENSES	0	
¥	CURRENT ASSETS	1,357,992	_
Accete	OTHER ASSETS	0	
٩	FIXED ASSETS @ COST	1,750,000	
	ACCUMULATED DEPRECIATION	78,573	
	NET FIXED ASSETS	1,671,427	
	TOTAL ASSETS	3,029,419 A	
>	ACCOUNTS PAYABLE	\$ 236,297	
4	ACCRUED EXPENSES	26,435	_
Fauity	CURRENT PORTION OF DEBT	100,000 B	
		113,587	
≪	CORREIN EIADIEITIES	476,319	
iabilities	LONG-TERM DEBT	800,000 C	
	CAPITAL STOCK	1,550,000	
7	RETAINED EARNINGS	203,100	
=	SHAREHOLDERS' EQUITY	1,753,100 D	
	TOTAL LIABILITIES & EQUITY	\$ 3,029,419	_

Debt to Equity =
$$\frac{Current + LT\ Debt}{Shareholders'Equity} = \frac{B+C}{D} = \frac{\$100,000 + \$800,000}{\$1,726,883} = 0.5$$

Debt Ratio =
$$\frac{Current + LT \ Debt}{Total \ Assets} = \frac{B + C}{A} = \frac{\$100,000 + \$800,000}{\$3,029,419} = 0.3$$

			Fin	ancial 1	Ratios b	Financial Ratios by Industry	try		
	LIQUIDITY RATIO	,	ASSET RATIOS			PROFITABIL	PROFITABILITY RATIOS		LEVERAGE RATIO
INDUSTRY	CURRENT	INVENTORY TURN High Favorable	RECEIVABLE DAYS Low Favorable	ASSET TURN High Favorable	GROSS MARGIN High Favorable	RETURN ON SALES High Favorable	RETURN ON ASSETS High Favorable	RETURN ON EQUITY High Favorable	DEBT TO EQUITY
AIRLINES	1.9% ⊿	167	23 7	8.0	₽ 29% N	3.5%	90.9	11.6%	1.9
APPAREL MANUFACTURING	2.1 7	2 2	85	1.1	41%	1.8% ⊻	5.7%	3.0%	6.0
BANKING	8.0	n/a	n/a	n/a	n/a	n/a	2.0%√	2.1%∨	6.4 ₪
BROADCASTING	0.8	12	66	0.4	¥8% ₪	5.0%	5.7%	9:6%	1.2
CHEMICALS	1.0	6	91	0.5	∇ %61	1.7% ≥	4.3%	3.4%	1.9
COMPUTER MANIFACTURING	1.0	15 7	N 811	0.5	37%	8.2%	7.5%	11.0%	9.0
CONSTRUCTION EQUIPMENT	1.5	9	₹ 991	9.0	K %6Z	8.9%	10.0% オ	21.2% ス	2.0
FFINANCIAL SERVICES	1.1	n/a	n/a	№ 1.0	40%	7.7%	2.2%∨	6.9%	2.1
HOSPITAL & HEALTH CARE	1.7	13	28	1.0	e/u	3.8%	8.1%	4.6%	1.1
HOTELS	1.0	n/a	36	№ 1.0	∠ %28	9.0%	11.3% ⊅	16.2% ス	2.5
INFORMATION TECHNOLOGIES	2.1 ⊅	9	73	0.5	%19	3.4%	2.3%∨	4.5%	9.0
INSURANCE	0.4 ⋈	n/a	n/a	0.2 N	41%	3.4%	2.2%∨	4.5%	9.0
OIL & GAS EXPLORATION	0.8	∠ 82	74	0.4	41%	11.8%	9.0%	11.5%	9.0
PHARMACEUTICLES	1.1	V 4	∠ 251	0.4	48%	11.4%	7.5%	10.5%	8.0
RESTAURANTS	0.8	18 7	36	0.7	25%	5.4%	8.7%	14.0% コ	1.0
RETAIL	0.7	L	1 2 3	1.7 א	∇ %27	7.5%	9.0%	14.1% ⊅	8.0
SOFTWARE	0.5 ₪	∠ 97	83	0.4	∠ %89	16.9% ス	12.4% ⊅	19.5% א	0.4 オ
SUPERMARKETS	1.0	13	14 7	2.2 7	Z8% ≥	1.0% ⋈	5.4%	7.5%	8.0
TELLICOMUNICATIONS	0.8	4 4	∠ 221	№ 8.0	∠ %88	5.5%	4.6%	4.2%	6.0
UTILITIES	1.1	15	32	9.0	33%	%0'9	2.9%	1.7% ₪	1.8
Adapted from Almanac of Business & Industrial Ratios by Leo Troy.	Industrial Rati	ios by Leo Troy.			FAVOR	FAVORABLE 7	LESS FAVO	LESS FAVORABLE Y	
					Note: Sometim formance; some arrows and dov worse average	Note: Sometimes a high number for a ratio formance; sometimes a low number is bette: arrows and down Y arrows to indicate whic worse average performance for a ratio type.	per for a ratio comber is better. indicate which a ratio type.	Note: Sometimes a high number for a ratio can demonstrate better performance; sometimes a low number is better. Here we have used up A arrows and down N arrows to indicate which industries have a better or worse average performance for a ratio type.	etter per- ed up a a better or

Alternative Accounting Policies and Procedures

ACCOUNTING POLICY	AGGRESSIVE APPLICATION	CONSERVATIVE APPLICATION
Revenue Recognition	At Sale (Some risk remains)	After Sale (Buyer carries all Risk)
Cost of Goods & Inventory Valuation Method	FIFO (First-in, first-out)	LIFO (Last-in, first-out)
Depreciation Method	Accelerated (Faster)	Straight-Line <i>(Slower)</i>
Reserves & Allowances (Warranty, Bad Debt, Returns)	Low Estimates (Higher profit now)	High Estimates (Higher profit later)
Contingent Liabilities	Footnote only (Postpone bad news)	Accrue When Known (Take losses now)
Advertising & Marketing Expenditures	Capitalize (Write-off later)	Expense (Write-off now)

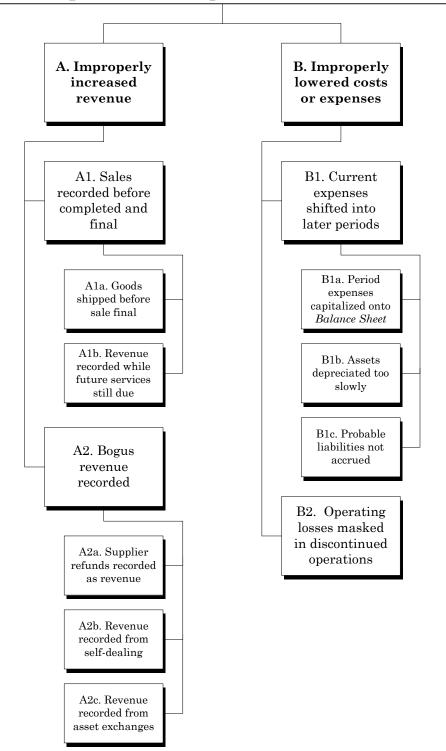
Effects of Inventory Valuation Method Choice on Inventory Valuation and Cost of Goods Sold (COGS)

			AVERAGE	LAST-IN,	FIRST-IN,
		PURCHASE	COST	FIRST-OUT	FIRST-OUT
	UNITS	PRICE	METHOD	(LIFO)	(FIFO)
FIRST INVENTORY PURCHASE	1,000	\$1,000			
SECOND INVENTORY PURCHASE	1,000	1,050●			\neg
THIRD INVENTORY PURCHASE	1,000	1,100			
FOURTH INVENTORY PURCHASE	1,000	1,150			
TOTAL INVENTORY	4,000	\$4,300		\neg	
AVERAGE COST PER 1,000 UNITS		\$1,075€	\neg		
SALES REVENUE	(1,000 units	@\$1.50)	\$1,500	\$1,500	\$1,500
COST OF GOODS SOLD			1,075	1,150	1,000
GROSS PROFIT			→\$ 425	→\$ 350	→\$ 500
STARTING INVENTORY VALUE LESS COST OF GOODS SOLD VALUE			\$4,300 1,075	\$4,300 1,150	\$4,300 1,000
ENDING INVENTORY VALUE			\$3,225	\$3,150	\$3,300

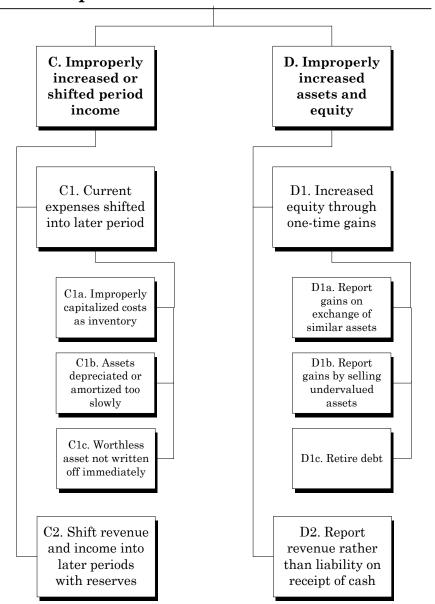
Summary of FIFO vs. LIFO Financial Statement Effects

	LIFO	FIFO
COST OF GOODS	^	Ψ
Inventory Value	$lack \Psi$	^
Profits	$oldsymbol{\Psi}$	^

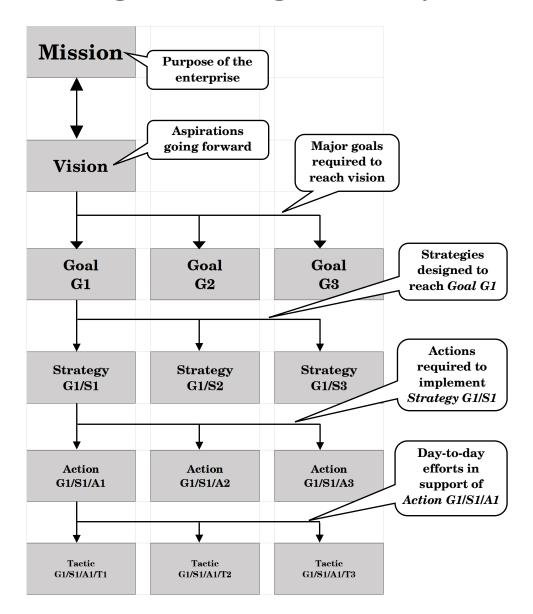
Techniques to Puff Up the Income Statement



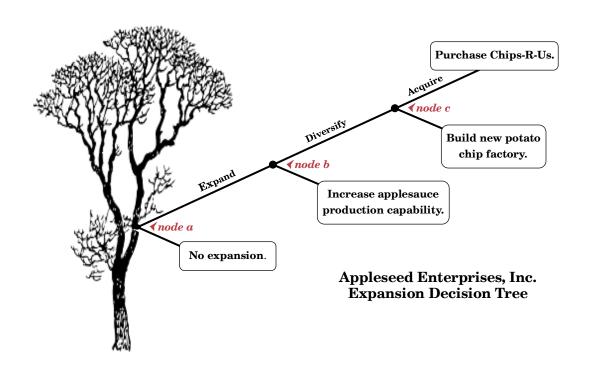
Techniques to Sweeten the Balance Sheet



Strategic Planning Hierarchy



• Think of a company's Mission, Vision, and Goals as a hierarchy of *destinations*, and its Strategies, Actions, and Tactics as a hierarchy of *ways to get there*.



Equity Ownership & Dilution at Several Pre-Money Valuations

	PRE-	DEAL	DEAL	DEAL	DEAL
	OFFERING	Α	В	С	D
INITIAL SHARES	200,000	200,000	200,000	200,000	200,000
PROPOSED PRE-MONEY VALUATION		\$2,500,000	\$3,000,000	\$3,500,000	\$4,000,000
SHARE PRICE (PRE- & POST-MONEY)		\$12.50	\$15.00	\$17.50	\$20.00
EQUITY \$ TO BE RAISED		\$800,000	\$800,000	\$800,000	\$800,000
NEW SHARES TO BE ISSUED		64,000	53,333	45,714	40,000
OUD CHARGE (INITIAL)	E0.000	F0 000	E0.000	E0.000	E0.000
+ OUR SHARES (INITIAL)	50,000	50,000	50,000	50,000	50,000
+ INVESTORS' SHARES (INITIAL)	150,000	150,000	150,000	150,000	150,000
+ NEW INVESTOR SHARES		64,000	53,333	45,714	40,000
= TOTAL SHARES		264,000	253,333	245,714	240,000
our % ownership	25.0%	18.9%	19.7%	20.3%	20.8%

AppleSeed Enterprises Capital Structure Pre- & Post-Financing

	CAPITAL AS OF TRANSACTION 31 (page 175)	PROPOSED NEW FINANCING	TOTAL AFTER NEW FINANCING	% OF TOTAL CAPITAL
+ Shareholders' equity	\$1,726,883	\$800,000	\$2,526,883	60%
+ MORTGAGE OUTSTANDING	\$900,000		\$900,000	21%
+ NEW CREDIT LINE		\$800,000	\$800,000	19%
= TOTAL CAPITAL	\$2,626,883	\$1,600,000	\$4,226,883	100%
DEBT-TO-EQUITY RATIO	0.5		0.7	

Transaction 32. - Finance Expansion

NET SALES	\$	-
COST OF GOODS SOLD		-
GROSS MARGIN	•	-
SALES & MARKETING		-
RESEARCH & DEVELOPMENT		-
GENERAL & ADMINISTRATIVE		-
OPERATING EXPENSE	·	-
INCOME FROM OPERATIONS		-
NET INTEREST INCOME		-
INCOME TAXES		-
NET INCOME	\$	•

Income Statement

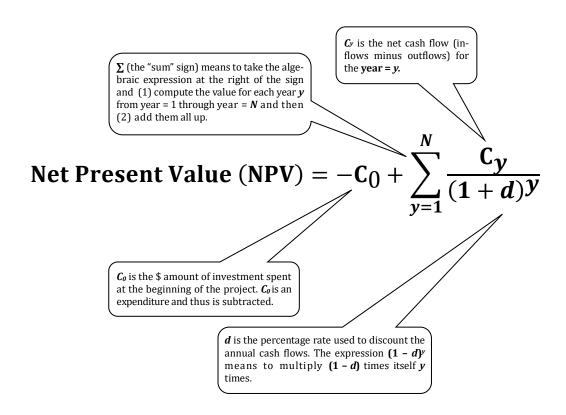
Cash Flow Statement

BEGINNING CASH BALANCE	\$ 0	
CASH RECEIPTS	-	
CASH DISBURSEMENTS	-	
CASH FLOW FROM OPERATIONS	-	_
PP&E PURCHASE		
NET BORROWINGS	100,000	[2
INCOME TAXES PAID	0	
SALE OF CAPITAL STOCK	800,000	
ENDING CASH BALANCES	\$ 900,000	_

	CASH 3	\$	900,000	Balance Sheet
	ACCOUNTS RECEIVABLE		•	
	INVENTORIES		•	
	PREPAID EXPENSES		0	
1	CURRENT ASSETS		900,000	
Assets	OTHER ASSETS		0	
٩	FIXED ASSETS @ COST		-	
	ACCUMULATED DEPRECIATION		-	
	NET FIXED ASSETS		-	
	TOTAL ASSETS		900,000	=
_	ACCOUNTS PAYABLE	\$	-	
ŧ	ACCRUED EXPENSES		-	
Equity	CURRENT PORTION OF DEBT		100,000	2 A
ш	INCOME TAXES PAYABLE			O / ·
∞ ∞	CURRENT LIABILITIES	•	100,000	
Liabilities	LONG-TERM DEBT		-	
≡	CAPITAL STOCK		800,000	I A
ᅙ	RETAINED EARNINGS		-	
Ë	SHAREHOLDERS' EQUITY		800,000	
	TOTAL LIABILITIES & EQUITY	\$	900,000	_

Computing PV and FV with Excel®

	Α	В	С) E	F	G	Н	- 1	J
1									
2		Monthly Pay	ments on a	\$10,000 Car	Loan at 10)% Ar	nual intere	est rate	
4				Excel func					
6		0.83%	[rate]	% interest	rate per pe	riod	(10%/12).		
7		48	[nper]	total numb	per of mont	thly p	ayments		
8		(\$253.63)	[pmt]	\$ payment	t eash mon	th			
10				PV(.0083,4	18,-253.63)				
11			\$10,000	= PV(B6,B7,	B8)				
13			\$10,000	Total Princ	iple Payme	nts			
14			\$2,174	Total Inter	est Paymer	nts			
15			\$12,174	Total Payn	nents				
16									
17	Future Value of Total Car Loan Payments Discounted to Origination								
19				Excel func	tion =FV ([ı	rate]	[nper], [pr	nt],[pv])	
21		\$10,000	[pv]	present \$ \	value of fut	ure p	ayments		
23				FV(.0083,4	! 18,-253.63,:	1000	O)		
24			\$0	= FV(B6,B7,	B8,B21)		-		



Net Present Value (NPV) Example

• Using the sample capital project cash flows in this table, we will calculate the NPV for the project.

_				
CASH FLOWS	START	YEAREND YEAR 1	YEAREND YEAR 2	YEAREND YEAR 3
– Initial Investment (C_0)	$C_0 = 725			
+ Cash Inflow in Year		\$500	\$800	\$950
- Cash Outflow in Year		\$200	\$350	\$450
= Net Cash Flow for Year	(\$725)	$C_1 = 300	$C_2 = 450	$C_3 = 500

Array the equation for three years including the initial investment (C_0):

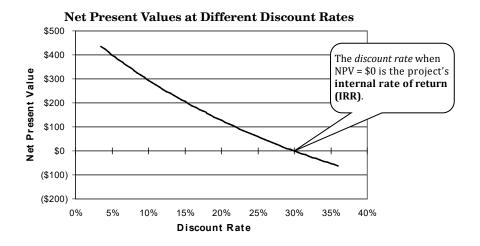
$$NPV = -C_0 + \frac{c_1}{(1+d)^1} + \frac{c_2}{(1+d)^2} + \frac{c_3}{(1+d)^3} +$$

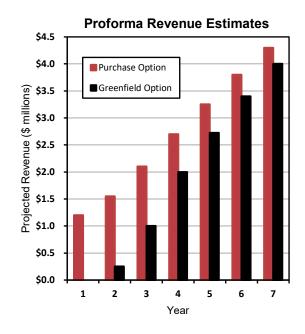
Then substitute variables for cash flow amounts and use a discount rate of, say, 12%, and solve:

$$NPV = -\$750 + \frac{\$300}{1 + 0.12} + \frac{\$450}{(1 + 0.12)(1 + 0.12)} + \frac{\$500}{(1 + 0.12)(1 + 0.12)(1 + 0.12)} = \$257$$

• Using the Excel function gives the same result:

Α	В	С	D	E	F	G	Н	ı
	Net Preser	nt Value (NP\	/)	Example				
				Excel funct	tion =NPV (rate,[value	1], [value2]	,)
	12%	rate		discount ra	ite			
	(\$725)	[value1]		C ₀ initial \$	investment	(beginning	year 1 outla	ıy)
	\$300	[value2]		C ₁ \$ return	ed year-end	11		
	\$450	[value3]		C ₂ \$ return	ed year-end	12		
	\$500	[value4]		C ₃ \$ return	ed year-end	d 3		
				NPV(.12,30	00,450,500)	- 725		
		\$257	=	NPV(B6,B9	,B10,B11) ·	+ B8		
	A	12% (\$725) \$300 \$450	12% rate (\$725) [value1] \$300 [value2] \$450 [value3] \$500 [value4]	12% rate (\$725) [value1] \$300 [value2] \$450 [value3] \$500 [value4]	12% rate discount rate (\$725) [value1] C_0 initial \$ \$300 [value2] C_1 \$ return \$450 [value3] C_2 \$ return \$500 [value4] C_3 \$ return NPV(.12,30	Excel function =NPV (1) 12% rate discount rate (\$725) [value1] C ₀ initial \$ investment \$300 [value2] C ₁ \$ returned year-end \$450 [value3] C ₂ \$ returned year-end \$500 [value4] C ₃ \$ returned year-end NPV(.12,300,450,500)	Excel function =NPV (rate,[value 12% rate discount rate	Excel function =NPV (rate,[value1], [value2] 12% rate discount rate (\$725) [value1] C_0 initial \$ investment (beginning year 1 outlated \$300 [value2] C_1 \$ returned year-end 1 \$450 [value3] C_2 \$ returned year-end 2 \$500 [value4] C_3 \$ returned year-end 3 NPV(.12,300,450,500) - 725





Appleseed Enterprises Inc. Expansion Alternatives—Purchase Option Cash Flow Analysis (in \$ thousands)

Purchase Option	Initial	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
1. Cash Flow from Operations (added to cash flow)		\$120	\$230	\$465	\$656	\$788	\$920	\$1,035
Depreciation (added back to cash flow)		131	150	160	198	195	182	168
Taxes (subtracteed from cash flow)		(24)	(28)	(140)	(223)	(268)	(313)	(352)
2. Capital Spending:								
Purchase assets of Chips-R-Us, Inc. induding old factory								
building and equipment	(1,125)	0	0	0	0	0	0	0
Repair old Chips-R-Us factory building		(275)	(120)	(20)	(20)	(10)	(10)	(10)
Refurbish old potato-chip-making machines		(200)	(75)	(2)	(2)	(2)	(2)	(2)
Purchase and install new fancy packaging machinery		(75)	0	0	0	0	0	0
Purchase and install state-of-the-art QC laboratory		(20)	0	0	0	0	0	0
Repair old delivery trucks and decorate with distinctive								
potato chip art		(22)	(25)	(2)	(2)	(2)	(2)	(2)
Enlarge factory to increase production capacity		0	0	(200)	(100)	0	0	0
Purchase/install additional potato-chip-making machines		0	0	0	(200)	(100)	0	0
3. Increases in Working Capital (subtracted from cash flow)		(300)	(88)	(138)	(156)	(131)	(138)	(125)
4. Terminal Value of Business (estimated 8x cash flow)		0	0	0	0	0	0	5,813
Sum of Cash Flows and Terminal Value	(\$1,125)	(\$69\$)	(\$15)	\$88	(\$185)	\$463	\$631	\$6,519
PV of Annual Cash Flows Discounted at 15.8%	(\$1,125)	(\$603)	(\$11)	\$56	(\$103)	\$223	\$262	\$2,335
Net present value (NPV) for purchase option @15.8% Discount Rate =	lue (NP\	/) for pu	rchase	option @)15.8% D	iscount	Rate =	\$1,034
Cumulative Cash Flows	(\$1,125)	(\$1,823)	(\$1,838)	(\$1,750)	(\$1,935)	(\$1,472)	(\$841)	\$5,679

Lowest Cumulative Cash Flow (in year 4) = (\$1,935)

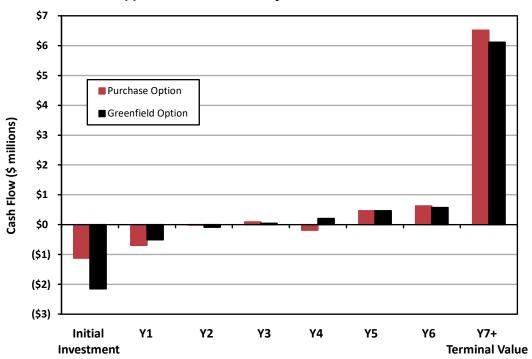
Total Capital Spending = (\$3,080)

Appleseed Enterprises Inc. Expansion Alternatives—Greenfield Option Cash Flow Analysis (in \$ thousands)

Greenfield Option	Initial	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
1. Cash Flow from Operations (added to cash flow)		\$0 216	\$50 238	\$250 235	\$400	\$681	\$850 185	\$1,000
Taxes (subtracted from cash flow)		0	(13)	(75)	(136)	(232)	(289)	(340)
2. Capital Spending:								
Build large new tactory building specifically designed				,	,		,	,
for potato chip processing	. (2,150)	0	0	0	0	0	0	0
Purchase and install high-capacity potato-chip-making								
machinery		(009)	(220)	(100)	0	0	0	0
Purchase and install new fancy packaging machinery		(75)	0	0	0	0	0	0
Purchase and install state-of-the-art QC laboratory		(20)	0	0	0	0	0	0
Purchase new delivery trucks and decorate with								
distinctive potato chip art		0	(20)	(75)	(25)	0	0	0
3. Increases in Working Capital (subtracted from cash flow)		0	(63)	(188)	(250)	(181)	(169)	(150)
4. Terminal Value of Business (estimated 8x cash flow)		0	0	0	0	0	0	5,439
Sum of Cash Flows and Terminal Value	(\$2,150)	(\$209)	(\$84)	\$48	\$208	\$470	\$577	\$6,119
PV of Annual Cash Flows Discounted at 15.8%	(\$2,150)	(\$440)	(\$9\$)	\$31	\$116	\$226	\$239	\$2,191
Net present value (NPV) for greenfield option @15.8% Discount Rate	lue (NPV,) for gre	enfield	option @	,15.8% D	iscount	Rate =	\$148
Cumulative Cash Flows	(\$2,150)	(\$2,659)	(\$2,746)	(\$2,150) (\$2,659) (\$2,746) (\$2,699) (\$2,491) (\$2,021) (\$1,443)	(\$2,491)	(\$2,021)	(\$1,443)	\$4,676
			owest C	Lowest Cumulative Cash Flow (in year 2) =	e Cash Fi	low (in y		(\$2,746)

Total Capital Spending = (\$3,375)

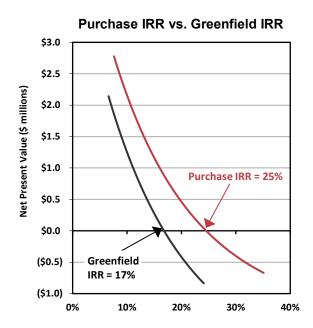
AppleSeed's Make vs. Buy Estimated Cash Flows



Financial Comparison of AppleSeed's Expansion Alternatives

✓ checks show the superior alternative.

	ACQUIRE	BUILD FROM
	CHIPS-R-US, INC.	SCRATCH
NET PRESENT VALUE (NPV)	✓ \$1,034,000	\$148,000
INTERNAL RATE OF RETURN (IRR)	√ 25%	17%
LOWEST CUMULATIVE CASH	√ (\$1,935,000)	(\$2,746,000)
TOTAL CAPITAL SPENDING	√ (\$3,080,000)	(\$3,375,000)



Transaction~33.~-Acquire~a~Business

NET SALES	\$ -	Income Statement
COST OF GOODS SOLD	-	_
GROSS MARGIN	-	_
SALES & MARKETING	-	
RESEARCH & DEVELOPMENT	-	
GENERAL & ADMINISTRATIVE	35,000	(2) A
OPERATING EXPENSE	35,000	
INCOME FROM OPERATIONS	(35,000)	
NET INTEREST INCOME	-	
INCOME TAXES	-	
NET INCOME	\$ (35,000)	_

BEGINNING CASH BALANCE	\$	-	Cash Flow Statement
CASH RECEIPTS		-	
CASH DISBURSEMENTS		-	
CASH FLOW FROM OPERATIONS		-	_
PP&E PURCHASE	1,2	250,000	D A
NET BORROWINGS		-	
INCOME TAXES PAID		-	
SALE OF CAPITAL STOCK		-	
ENDING CASH BALANCES	\$ (1,2	250,000)	

	CASH	\$ (1,250,000)	Balance Sheet
	ACCOUNTS RECEIVABLE	-	
	INVENTORIES	-	
	PREPAID EXPENSES	-	
\$	CURRENT ASSETS	(1,250,000)	•
Assets	OTHER ASSETS	50,000	
Q	FIXED ASSETS @ COST	1,200,000	
	ACCUMULATED DEPRECIATION	-	
	NET FIXED ASSETS	1,200,000	
L	TOTAL ASSETS	\$0	=
			.
>	ACCOUNTS PAYABLE	\$ 35,000	(2) B
ŧ	ACCRUED EXPENSES	-	
Equity	CURRENT PORTION OF DEBT	-	
	INCOME TAXES PAYABLE	-	
∘ŏ	CURRENT LIABILITIES	35,000	
Liabilities	LONG-TERM DEBT	-	
i i	CAPITAL STOCK	-	
믕	RETAINED EARNINGS	(35,000)	(2) C
Ė	SHAREHOLDERS' EQUITY	(35,000)	
	TOTAL LIABILITIES & EQUITY	\$0	_

Appendix A. Short History of Business Fraud and Speculative Bubbles

The Spanish-born American philosopher George Santayana said, "Those who cannot remember the past are condemned to repeat it." To save you, the potentially poor reader, from financial ruin, what follows is a rogue's gallery of financial frauds to avoid. First, here are a few investing rules that will help you avoid such frauds:

- 1. Do not invest in arcane schemes with promoters who will not explain the investments clearly. Make sure you understand exactly where the investment returns will come from and at what risk.
- 2. Beware the "quick buck" or getting "something for nothing." Promises of "too-good-to-be-true" returns are just that.
- 3. Always do reference checking before investing. Charlatans spend much time, money, and effort in trying to appear legitimate. Beware. Do not be fooled.

Unfortunately, just following these three rules doesn't guarantee you will never be fleeced. So, do not "put all your eggs in one basket." That way, even if you are duped, not everything is lost. Diversify your investments.

Ponzi Schemes

In a Ponzi scheme, gullible investors are enticed to purchase arcane invest-

ments that promise fantastic returns. Early investors are paid off with money raised from later victims, until no more money can be raised.

Ponzi schemes are doomed to collapse because there are no underlying earnings — just recycling of money. However, not all investors lose. The first investors can gain if they manage to get out in time.

Charles Ponzi (1919) With \$200 in borrowed capital, the "Ponzi scheme" namesake, Charles Ponzi, opened his Securities Exchange Company at 27 School Street in Boston on the day after Christmas in 1919.

Ponzi claimed to invest in an arbitrage of international postage return coupons and promised a 50% return in 45 days and a 100% return in 90 days. Early investors did get these spectacular returns. Actually, Ponzi was paying off the early investors by using money received from new investors.

For a time, Ponzi was the toast of the Northeast. His investment company was a great success. In 1920, Ponzi bought a grand house in Lexington, a wealthy suburb of Boston, and even a local bank, the Hanover Trust Bank.

However, Ponzi's operation collapsed in August 1920 when, based on a tip from a local newspaper, federal agents raided Ponzi's corporate headquarters and the Massachusetts Attorney General put him in jail. In a little more than eight months,

"You only find out who's swimming naked when the tide goes out."

Warren Buffett

commenting on seeing financial fraud when markets collapse

Ponzi had collected \$10 million from more than 10,000 investors. In bank-ruptcy, investors received just 37 cents on the dollar.

At trial, Ponzi pleaded guilty to federal charges of mail fraud and was sentenced to five years in federal prison, serving three years. When released from federal prison and facing state charges, Ponzi jumped bail and fled to Florida, where he set up a real estate business and began selling "prime Florida property" (i.e., swamp land) to gullible investors. Eventually, Ponzi spent nine years in a Massachusetts prison and then was deported back to Italy.

Bubbles

Bubbles are fueled by speculators who are willing to pay even greater prices for already overvalued assets sold to them by the speculators who bought them in the preceding round.

Each financial bubble in history has been different, but they all involve a mix of fundamental business and psychological forces. In the beginning stages, an attractive return on a stock or commodity drives prices higher and higher. People make questionable investments with the assumption that they will be able to sell later at a higher price to a "greater fool." Unrealistic investor expectations take hold and become self-fulfilling until the bubble "pops" and prices fall back to a more reasonable underlying value.

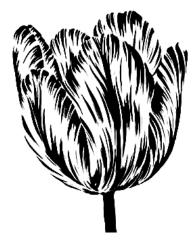
Why do bubbles sometimes last so long? One reason is that nobody likes to be a "party pooper" and people are getting rich. In addition, there is nothing inherently illegal about profiting during a bubble. The only problem is getting out before the collapse. Whoever owns the overpriced asset when the bubble pops is the loser, just as the last person standing in a game of musical chairs.

Tulip Bulbs (1630s) One of the most famous market bubbles took place in the 17th century in Holland where tulip bulbs were traded for small fortunes. Flowers and bulbs became coveted luxury items and status symbols.

The most spectacular and highly sought tulip bulbs would grow flowers with vivid colors, lines and flames on the petals, especially those infected with a rare type of mosaic virus causing a variegated pattern. Spectacular single bulbs went for as much as 5,000 Dutch guilders, a truly remarkable sum given that Rembrandt received only about one-third that amount for painting The Night Watch in 1642.

Good bulbs were scarce. It took seven years to grow a tulip bulb from seed and there was no guarantee that the resulting flower would be as good as the parent. If divided, bulbs would breed true, but dividing bulbs could occur only every two years.

Tulips bloom in April and May for only about a week, and bulbs can be uprooted and moved safely only from June to September. Thus "spot market" purchases for actual bulb delivery occurred only during these months.



"Flame" Tulip

NASDAQ Composite Index



In early 1636, Dutch traders, meeting in local taverns, created a type of formal "futures market" where contracts to buy bulbs at the end of the season were bought and sold. Contract price of rare bulbs continued to rise all throughout the year. However, in February 1637, prices for tulip bulb contracts collapsed abruptly and the trade of tulip contracts and of bulbs ground to a halt. Bulbs then fetched less than a penny on the dollar.

In fact, no actual deliveries of bulbs were ever required to satisfy these futures contracts. The Dutch Parliament passed a decree that contracts could be voided for a small fee — perhaps the first government "bailout" of a speculative bubble!

Technology Stocks (1995–2001) The "dot-com" bubble was a speculative stock market bubble of the late 1990s, collapsing in 2001. The period was marked by the emergence of new Internet-based companies commonly referred to as "dot-coms." stocks and widely available venture capital created an over-exuberant

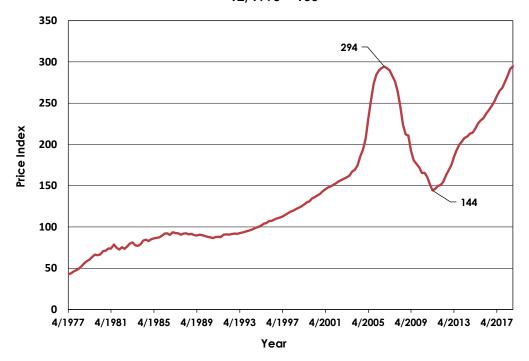
environment. Many of the start-up dotcom businesses dismissed standard business models and focused on increasing market share at the expense of the bottom line. Companies became grossly overvalued.

In March 2000, the NASDAQ Composite Index peaked at over 5,000, more than double its value of just a year before. In the next two years the market crashed to less than 1,500, and almost \$5 trillion in market value evaporated. See the graph of NASDAQ prices above. The Index recovered, but it took 15 years.

U.S. Housing Crisis (2008–2010) The U.S. housing price bubble burst in 2007, with house prices dropping everywhere. On average, house prices across the United States had increased by an unsustainable 143% in the prior decade, driven by easy loans and speculative feelings of buyers and bankers that prices would rise forever. Who knew?

Investing in bubbles can be quite profitable if you can get out before the bubble bursts. Many people did not get

Phoenix, AZ House Price Index 12/1995 = 100



out in this crisis, and many lost their homes to foreclosure.

Phoenix, Arizona homes were particularly hard hit, losing over 50% of their value peak-to-valley. Prices have recovered, but it took over 10 years after the crash.

Bitcoin (2017-2018) Here we go again. The cryptocurrency Bitcoin soared in value the winter of 2017 and promptly fell back to earth in the spring of 2018. Why? Who knows? Possible explanations for bizarre bubble behavior (only seen in hindsight, sigh) include:

- 1. "Greater Fool Theory" where a fool overpays hoping to sell later to a "greater fool" at a profit.
- 2. Participants extrapolating from past rising prices projecting similar rises in the future, even to totally unreasonable heights.

- 3. Everybody is doing it, so let's follow the herd and continue the party.
- 4. People playing with other people's money with little to lose and perhaps big gains thru commissions and fees.

Whatever the reason, these speculative bubbles seem to regularly occur in all economies.

Bubbles are not caused by fraudulent activity as much as by human avarice and frailty. However, swindles and accounting fraud often come to light just after bubbles pop. Often nobody is looking and few care while the good times roll. Highly leveraged frauds often run out of cash and collapse when bubbles pop.

Garden-Variety Fraud

Most large business frauds are deceptively simple. Some people with power and high positions lie, cheat, and steal. Often accountants and regulators do not

"... A speculative bubble is a social epidemic whose contagion is mediated by price movements."

Robert Shiller

Yale University economics professor and Nobel Laurate

catch the crooks until real damage has been done. Some of the more amazing recent frauds are discussed here.

Salad Oil Scandal (1963) Anthony "Tino" De Angelis was a Bayonne, New Jersey-based commodities trader who bought and sold vegetable oil for his company, Allied Crude Vegetable Oil Refining Corporation.

Tino master-minded a scam where ships apparently full of salad oil (but mostly filled with water with only a few feet of salad oil on top) would arrive at the New Jersey company docks. Inspectors would confirm that the ships were full of oil (but only by looking at the top of the tanks) and would release to Tino's company millions of dollars in loans on the supposed delivery of this new inventory.

The swindle collapsed when Tino got greedy and tried to corner the world's salad oil market by buying futures contracts using this fraudulently borrowed money. More than 50 banks including Bank of America, American Express, and many international trading companies lost over \$1 billion in today's dollars. Tino ended up with a seven-year jail sentence.

Enron (2001) A Houston-based energy trading company, Enron Corporation was the seventh largest company (revenues of over \$100 billion) in the United States in 2000. Then the bottom fell out and Enron filed for bankruptcy protection in 2001.

What happened? Willful corporate fraud through "institutionalized, systematic, and creatively planned" accounting fraud said the federal indictments. Sen-

Bitcoin Value in U.S. Dollars



"...there must be a vast fund of stupidity in human nature, or else men would not be caught as they are, a thousand times over, by the same snares ... while they yet remember their past misfortunes, they go on to court and encourage the causes to what they are owing, and will again produce them."

Cato the Younger (95–46 BC)

Roman Orator

ior Enron corporate officials, including the company's chief financial officer, set up "limited partnership" shell companies to mask debt liabilities. Then Enron, the parent company, would sell assets between the shell companies, book revenue, and then report sham profits.

The company's stock price hit \$90 per share in the summer of 2000, and insiders started to sell. The stock eventually dropped to less than 20 cents per share. More than \$60 billion in company stock value and more than \$2 billion in employee pension plan funds were lost.

Enron founder and chairman, Ken Lay, was convicted of fraud, but died of a heart attack before being sentenced. Former Enron CEO Jeffrey Skilling is currently serving a 24-year sentence for fraud. Andrew Fastow, the former chief financial officer and some say mastermind behind the company's complicated financial schemes, got off easy with only a six-year prison sentence; his wife went to prison for a year as an accomplice to tax fraud. Watch out when your spouse asks you to sign that joint federal tax return!

Arthur Anderson LLP, the once-large worldwide accounting firm, was Enron's accountant. In 2002, the firm was convicted of obstruction of justice for shredding documents related to its audit of Enron. Then, as a convicted felon, Anderson could no longer provide CPA services to public companies. The firm collapsed.

In 2001, Arthur Anderson employed 85,000 people worldwide and 28,000 people in the United States, and had revenues exceeding \$9.3 billion. Today, the firm has a single office in Chicago with 200 employees.

WorldCom (2002) Before its 2002 bankruptcy filing, WorldCom had become the second-largest long distance telephone company in the United States. (AT&T was then the largest.) The company grew primarily by buying smaller telecommunications companies, but a general business slowdown put a damper on further acquisitions and its business.

To cover up declining earnings, senior management directed underreporting of costs (interconnection expenses with other tele-communications companies) and booking bogus accounting entries to overstate revenues. By the time the scheme collapsed, WorldCom's assets were overinflated by almost \$11 billion. The company's stock plummeted from over \$60 per share to less than a buck.

Bernard Ebbers, WorldCom's infamous chairman and CEO, was convicted of fraud and filing false documents to regulators. He is serving a 25-year prison term at Oakdale Federal Correctional Complex in Louisiana. The earliest date that Bernie (Inmate #56022054) can be released is July 2028, at which time he will be 85 years old. Five other former WorldCom executives are also serving time.

Sarbanes-Oxley

As you can see from our examples, the early 2000s were a particularly ripe time for fraud of the "garden variety." The United States Congress was outraged! Outraged by so much executive malfeasance! Something had to be done!

So, Congress passed a law, the "Public Company Accounting Reform and Investor Protection Act of 2002," called "Sarbanes-Oxley" for short, named after the bill's primary sponsors Senator Paul Sarbanes (D-MD) and Representative Michael G. Oxley (R-OH). The bill passed the House 423–3 and the Senate 99–0. President George W. Bush signed it into law stating it was the "most far-reaching reforms of American business practice since the time of Franklin D. Roosevelt."

The law has 11 sections outlining new rules and regulations for the financial reporting of public companies and the behavior of their senior executives and the accounting firms that audit them.

Under the new law, making or certifying misleading financial statements exposes senior corporate officials to substantial civil and criminal penalties. Now, CEOs and CFOs must personally certify that company financial statements "do not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by the report." Got that? Don't you feel safer already?

Sarbanes-Oxley has been criticized as just too much paperwork. Other commentators praise the law as essential to maintain the integrity of our capitalistic system. But, it has proved hard to keep fraudsters at bay. Witness the following.

Theranos (2002-2018) Founded in 2002 by Elizabeth Holmes, a beautiful Stanford dropout. The medical test equipment start-up, Theranos, experienced a spectacular rise before its ultimate downfall. At its height, the company had a market capitalization of over \$9 billion and 800 employees. Holmes then owned 50% and was ranked in *Forbes Magazine* as one of the richest women in the world.

Holmes attracted "the most illustrious board in U.S. corporate history" including former Secretaries of State George Schultz and Henry Kissinger, James Mattis, retired U.S. Marine Corps General and later Secretary of Defense under U.S. President Donald Trump, former U.S. Senators Bill Frist (R-TN), Sam Nunn (D-GA), and a few other wise old men apparently mesmerized by Holmes' beauty. Also, the company formed business agreements with Walmart, the Cleveland Clinic, Capital Blue Cross, Caritas, and others adding credibility.

It was all a big fraud. The technology did not work, and Holmes lied to investors about its promise. Holmes and her ex-lover, venture capitalist and Theranos COO and President Ramesh "Sunny" Balwani have been charged with nine counts of wire fraud and two counts of conspiracy to commit wire fraud and are awaiting trial in the U.S. District Court in San Jose, California. They face up to 20 years in prison.

Paradoxically, Holmes' father, Christian Rasmus Holmes IV, was a vice president at Enron.

What goes around, comes around.

Appendix B. Nominal vs. Real Dollars

In financial calculations spanning time, currency value can be looked at from two different perspectives. It's important when doing historical analysis or making financial projections to understand these two views of value.

One way to look at currency is as pieces of paper — you know, the ones in your wallet. A paper dollar today is the same piece of paper as a dollar tomorrow. These dollars are called "nominal dollars," or "current dollars." Their value is in the money of the day, today

In nominal dollars, a McDonald's Big Mac cost 50¢ 20 years ago and it costs \$3.75 today. Nominal dollars and current prices are just the dollars that Dad took out of his wallet to buy you that Big Mac 20 years ago or the dollars that you spent today to buy one for your son. However, prices tend to increase over time primarily due to inflation. Sometimes it is useful to look at "values" of goods in the past (or expected values in the future) rather than at their actual cost way back when in nominal dollars.

From this inflation-corrected perspective, we will use "real dollars," also called "constant dollars." Real dollars are nominal dollars that have been adjusted to take out (or add back in) the effects of inflation.

Why bother? Well, it is very difficult to analyze financially the price of today's Big Mac at \$3.75 with a 20-years-ago Big Mac at 50¢. It is basically the same burger. And thus, when you take out inflation (i.e., convert from nominal dollars into real dollars) the price difference becomes much more comparable and explainable.

Money Illusion

The term *money illusion* refers to the tendency of people (old people?) to think of currency in nominal rather than real terms. People remember and pay more attention to the numerical or face value of money (nominal dollars) than they do to its relative purchasing power (real dollars). Thus, Dad keeps talking about those 50¢ Big Macs just as Granddad kept telling us about a 10¢ breakfast of scrambled eggs, bacon and coffee. Whatever.

Nominal vs. Real Dollars

- In economic parlance, "nominal" dollars are the face value of currency, whereas "real" values have been corrected for inflation relative to some base year.
- All financial statements are reported in **nominal dollars.** If the company sold \$100 in widgets in 1995 and \$110 in widgets in 2006, then these numbers will be shown under the respective years in financial reports. So, sales were slightly up. Right?
- Not really in value terms. If we looked at sales in the two periods in **real dollars** (that is, corrected for inflation from 1995 to 2006), we would see that real sales were down in value (purchasing power).
 - To convert a nominal dollar amount from "year *y*" into real dollar purchasing power in another "year *x*," use the following formula. In the Consumer Price Index (CPI) issued by the Commerce Department, 1983/4 is selected as the base year equal 100.

Accounting for inflation between 1995 and 2006, we would need to sell \$132.28 worth of widgets in 2006 to equal the \$100 value of our sales performance back in 1995.

$$Real Dollars_{X} = Nominal Dollars_{Y} \left(\frac{CPI_{X}}{CPI_{V}}\right)$$

• Using our example and with the CPI_{1995} = 152.4 and the CPI_{2006} = 201.6, then

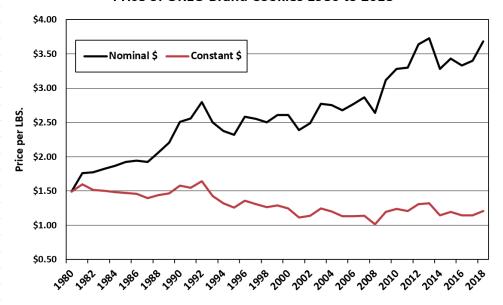
2006 Real Dollars =
$$$100 \times \left(\frac{201.6}{152.4}\right) = $132.28$$

Real Dollars (Constant Dollars)

- **Real dollars** (also called *constant dollars*) are amounts that have been adjusted to account for the impact of inflation. **Nominal dollars** (also called *current dollars*) are the actual dollars paid or received at the time without any adjustments.
- The following graph shows the selling price of a pound of OREO® Brand Cookies for each year from 1980 to 2018 in nominal dollars and also the value of the cookies in real dollars.

The nominal price consumers paid for a pound of cookies increased from \$1.49 in 1980 to \$3.68 in 2018. That is more than double the price. However, much of this price rise is due to inflation during the 38-year period. See the price (nominal and real) graph below.

Price of OREO Brand Cookies 1980 to 2018



• The data table on the next page shows the relationship between nominal dollars, the CPI, and inflationadjusted real dollars.

Price of OREO Brand Cookies from 1980 to 2018

YEAR	A. PRICES IN NOMINAL DOLLARS	B. PRICES IN 1980 REAL DOLLARS	CONSUMER PRICE INDEX (CPI)	YEAR	A. PRICES IN NOMINAL DOLLARS	B. PRICES IN 1980 REAL DOLLARS	CONSUMER PRICE INDEX (CPI)
1980	\$1.49	\$1.49	82.4	2000	\$2.61	\$1.25	172.2
1981	\$1.76	\$1.60	90.9	2001	\$2.39	\$1.11	177.1
1982	\$1.78	\$1.52	96.5	2002	\$2.49	\$1.14	179.9
1983	\$1.82	\$1.52	100.0	2003	\$2.77	\$1.24	184.0
1984	\$1.87	\$1.48	103.9	2004	\$2.75	\$1.20	188.9
1985	\$1.92	\$1.47	107.6	2005	\$2.68	\$1.13	195.3
1986	\$1.94	\$1.46	109.6	2006	\$2.76	\$1.13	201.6
1987	\$1.93	\$1.40	113.6	2007	\$2.87	\$1.14	207.3
1988	\$2.06	\$1.44	118.3	2008	\$2.64	\$1.01	215.3
1989	\$2.20	\$1.46	124.0	2009	\$3.11	\$1.20	214.5
1990	\$2.51	\$1.58	130.7	2010	\$3.28	\$1.24	218.0
1991	\$2.56	\$1.55	136.2	2011	\$3.30	\$1.21	224.9
1992	\$2.80	\$1.64	140.3	2012	\$3.64	\$1.31	229.6
1993	\$2.50	\$1.43	144.5	2013	\$3.73	\$1.32	233.0
1994	\$2.38	\$1.32	148.2	2014	\$3.28	\$1.14	236.7
1995	\$2.32	\$1.25	152.4	2015	\$3.43	\$1.19	237.0
1996	\$2.58	\$1.36	156.9	2016	\$3.33	\$1.14	240.0
1997	\$2.55	\$1.31	160.5	2017	\$3.40	\$1.14	245.1
1998	\$2.50	\$1.26	163.0	2018	\$3.68	\$1.21	251.0
1999	\$2.61	\$1.29	166.6				

Column A. Price in Nominal Dollars shows the actual amount consumers paid for a one-pound bag of OREO Brand Cookies in the year indicated.

CPI Column shows the Consumer Price Index for each year. CPI has been normalized by the United States Commerce Department so that 1983/84 prices are designated as 100.

Column B. Price in Real Dollars show the value of a one-pound bag of OREO Brand Cookies as adjusted for inflation using the equation on the prior page and the CPI value of 1980 as a base.

For example, although consumers in 1996 would have to pay \$2.58 for a pound of cookies in nominal dollars, the actual value of that amount in 1980 real dollars (that is, discounting for inflation from 1989 through 1996) would be only \$1.36, a 15¢ less than the nominal price in 1980.

Inflation over time can cause dramatic differences in real and nominal dollar amounts. Analysis of present, past, or future economic and business conditions must properly account to understand the sweep of financial history.

Appendix C. Nonprofit Accounting and Financial Statements

Important functions of for-profit financial statements are to: (a) correctly compute a company's profit and any tax liability in a period, and (b) report these results to owners and the government.

Nonprofit financial statements have a different purpose. There are no traditional owners of a nonprofit entity (just constituencies). But the government is still very interested in nonprofit financials and reporting. The nonprofit status for an organization provides a large tax break for the organization's activities as well as personal income tax deductions for donors.

Much of for-profit and nonprofit accounting and financial statements are the same. We will describe here the major differences. Hint, the biggest differences between these two organizational types is in the specific definitions of revenue and profit (surplus) and when and how they are recorded and reported.

The Nonprofit World

Almost all nonprofit organizations are state-chartered corporations and must register as such with the Secretary of State in the locale where they are organized. (The American Red Cross and the Boy Scouts of America are federally chartered.)

All nonprofit organizations must have a public purpose (mission) and they do not have "owners" in the traditional sense. They are held as a public trust and governed by a voluntary board of directors. Note that while all nonprofits do not pay taxes, only some nonprofits, "501(c)(3) public charities" offer tax deductions to their donors.

By law, no individual director or staff member of a nonprofit can benefit personally from any net profits (called *surplus* in nonprofit language) generated by the organization. On the other hand, in for-profit companies, profits belong to the owning shareholders.

Public Charities (501(c)(3) Organizations

Not all nonprofit organizations can accept tax-deductible contributions. Only so-called "public charities" can. 501(c)(3) refers to the section of IRS tax code describing public charities.

These charities include most organizations active in the arts, education, health care, and human services. Religious congregations are also considered public charities, but for constitutional reasons they are not required to register with the IRS.

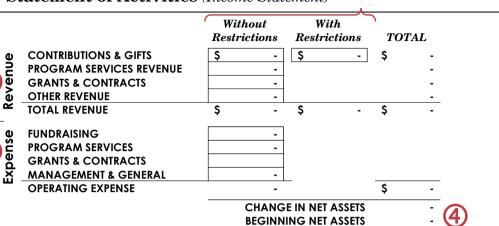
For all cash, check, or credit card donations, the nonprofit organization must provide the donor a written communication as a record of the contribution. Bank records (canceled checks, or credit card statements) are sufficient provided they show the date, the name of the charity, and the amount of the payment.

Nonprofit Statement of Activities

The nonprofit *Statement of Activities* is analogous to the *Income Statement* of for-profit companies. The *Statement of Activities* shows money coming into the organization (revenue) and money going out (expenses).

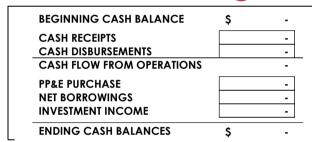
Nonprofit Financial Statements

Statement of Activities (Income Statement)

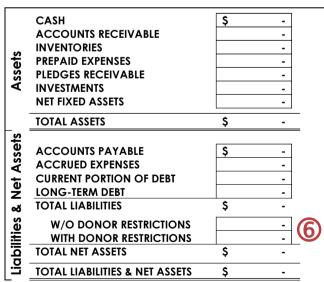


ENDING NET ASSETS

Statement of Cash Flows



Statement of Financial Position (Balance Sheet)



The money left over when you subtract expenses from revenue for a non-profit organization is called "surplus" or, more formally stated, the organization's **CHANGE IN NET ASSETS** over a specified time period. The term, **NET ASSETS** is unique to nonprofit accounting and is analogous to a for-profit-company's shareholders' equity on the *Income Statement*.

See the three main nonprofit financial statement formats on the facing page. A fourth statement, unique to nonprofit reporting, the *Statement of Functional Expenses*, is shown on page 279.

Nonprofit Revenue Types

Nonprofit revenue is all the money coming into the organization during the period (plus pledges to contribute in the future). Revenue is shown on the *Statement of Activities* and categorized by type:

CONTRIBUTIONS & GIFTS are recorded in the *Statement of Activities* when cash is received from a donor or a promise (pledge) to give cash in the future is made by the donor.

Pledges are formal and specific donor promises to give. Pledges to nonprofit organizations are handled in a very special way. They are recognized as revenue when the pledge is made, not when money is actually received.

Contributions and gifts (and pledges, when funded) are often tax deductible by the donor when given to 501(c)(3) public charities.

PROGRAM SERVICES REVENUE is recorded when the nonprofit organization provides a product or service to a client for a fee. This transfer of product or service for money is often called an "exchange transaction." The nonprofit organization exchanges its products or services for cash paid by the receiver of the products or services.

Just because goods and services are purchased from a nonprofit organization, does not mean that the nonprofit organization is jeopardizing its nonprofit status. Nonprofit organizations often sell goods and services that support their public mission. The nonprofit organization may even generate an increase in **NET ASSETS** (surplus) in the transaction, analogous to profit for a for-profit company. More later.

GRANTS & CONTRACTS is revenue from institutional donors such as governmental agencies, other charitable organizations, and foundations. These grants and contracts are usually: (a) for a specific stated purpose, (b) to be performed in a specific period of time, and (c) directly related to the recipient nonprofit organization's skills and charitable mission.

OTHER REVENUE is revenue received from sources other than those listed as separate line items. If revenue from a source type is large, it really should have its own line on the *Statement of Activities*. Membership fees, ticket sales, auction proceeds, revenue from special events, advertisement sales, contributed goods or services (at fair market value), and so forth, are examples of other types of revenue included here.

Nonprofit Revenue Restrictions

Revenue is classified on the *Statement of Activities* in two groupings, depending on whether any use restrictions are placed on the contribution by the donor:

Without Donor Restrictions (unrestricted revenue). The organization can use this revenue for any mission purpose at the discretion of the Board of Directors.

With Donor Restrictions (restricted revenue). The organization can only use this revenue for the specific purpose (and time period) specified by the donor (and accepted by the board). Prior to changes in nonprofit accounting practice (2017), endowments (only interest received can

be spent, never the principal) were a separate category. Now it is just thrown into the restricted revenue bucket.

Nonprofit Expenses

Expenses shown on the *Statement* of *Activities* are grouped into specific categories:

FUNDRAISING expenses are expenditures to solicit contributions, gifts, contracts, and grants.

PROGRAM SERVICES expenses are expenditures to deliver goods and services to clients in support of mission. Salaries and wages are often the biggest expense here.

GRANTS & CONTRACTS expenses are expenditures to fulfill the requirements of government and foundations contracts in support of the organization's mission.

MANAGEMENT & GENERAL expenses are sometimes called overhead. Expenditures for occupancy, utilities, general management, accounting, legal, and other keeping the doors open necessities.

Net Assets

Note the change, beginning, and ending **NET ASSETS** lines at the bottom of the *Statement of Activities*.

CHANGE IN NET ASSETS is simply the difference between the nonprofit organization's revenues and expenses for the period, often called surplus. This amount is analogous to profit in a for-profit company.

BEGINNING NET ASSETS is the accumulated annual changes in net assets since the nonprofit's inception — sum of UNRESTRICTED NET ASSETS and RESTRICTED NET ASSETS — shown on all the organization's prior year's Statements of Activities.

ENDING NET ASSETS is simply the sum of the beginning net assets at the start of the accounting period plus the net assets

generated by the organization in the current period. The double line designates a final total.

ENDING NET ASSETS will be shown as TOTAL NET ASSETS on the *Statement of Financial Position* for this accounting period and will be shown on the *Statement of Activities* as the BEGINNING NET ASSETS at the start of the next accounting period.

NOTE: The net assets of nonprofit organizations and profits of for-profit companies differ in that net assets belong to the organization itself and may *only be used* by the organization in support of its public mission. In contrast, all the profits made by a for-profit company belong to its shareholders (owners).

These profits are available for distribution as dividends to these shareholders. But since nonprofit organizations have no "owners" they can make no such distributions and all surplus is retained by the organization to be used in furtherance of its mission.

Statement of Financial Position

The Statement of Financial Position for a nonprofit organization shows the organization's financial strength at a single point in time, commonly reported at the end of a year. It is analogous to a for-profit company's Balance Sheet.

The statement presents: (a) assets — what the organization owns. (b) liabilities — what the organization owes others, and (c) net assets — what the organization's is worth.

NET ASSETS can be thought of as a special obligation of the organization to be used to serve its mission; and represents its unspent wealth (revenue minus expenses) accumulated since the founding of the organization. NET ASSETS are presented on the statement separately by restriction category.

Statement of Cash Flows

The nonprofit organization's *Statement of Cash Flows* is like a checkbook register and is structured just the same as that of a for-profit enterprise. You record the payments (cash outflows) and deposits (cash inflows) for a period of time.

Nonprofit Statement of Functional Expenses

This IRS required statement, unique to nonprofits, presents the organization's expenses in greater detail than on the *Statement of Activities*. A matrix format is used showing natural expenses in rows (salaries, benefits, supplies, and so forth),

		Nonprofit	Sta	teme	ent o	f Fu	ncti	onal	Expe	enses 🔟
					_	Progr	am Serv	vices	Suppo	rt Services
			<u></u>	on A Prot	8 Proces	Jan C Mar	oderneri	ceneral house indi	rect Over	edd 11 kroense
		Salaries & Benefits	Pro-	\$ Pro	\$ Pro	\$ MO.	Full \$	Ino	\$ \$	
		suidiles & Bellellis	3	•	÷	•	•		•	
		Rent & Utilities								
		Supplies								
(9 <	Contractors & Consultants								
		Depreciation								
	(1	Direct Overhead								
		all other								
		Total Expense	\$	\$	\$	\$	\$	\$	\$	
6	13)	Contributions & Gift Revenue	\$	\$	\$	\$	\$	\$	\$	
		Grants & Contract Revenue								
	Tote	al Program Revenue	\$	\$	\$					
	(Total F	Surplus Revenue - Total Expense)	\$	\$	\$	14)				

versus functional expenses in columns (specific programs and internal indirect program support services).

Programs

Most nonprofit organizations administer several stand-alone, though most often interrelated, programs. It is often useful to look at their financials separately and the *Statement of Functional Expenses* does just that.

Functional Expense Groups
Reporting by these groupings
shows the organization's expenditures by
major programs. Is the organization's
spending congruent with its mission? Is
it putting its money where its mouth is?

Natural Expense Groups Reporting by these groupings shows the organization's expenditures by the type of expense — how it spends its money to get desired results. Is this allocation of expenses the most efficient and effective mix?

Overhead

Overhead expenses are often viewed with suspicion by donors and other funders as a potential waste of money. However, these expenses are real (rent, utilities, audits, finance, staff training and so forth) and are required in a well-managed organization.

Classification of overhead as support services, direct overhead and indirect overhead, provides more information and additional clarity to these important and necessary expenses.

Support Service Allocations
Some overhead expenses are best
thought of as organization-wide, such as
the CEO's salary. Others can be assigned
to a specific program as direct overhead,
such as occupancy, the space costs used
by the program.

Indirect Overhead Indirect overhead is an expense type that is difficult to assign to a specific project or functional expense group.

Direct Overhead Direct overhead can be assigned but is really of an "all-other" type and does not fit into a natural expense group.

Revenue by Program As it prepares budgets, the board must decide and then earmark and allocate what unrestricted contribution and gift revenue monies will be used in which projects. As monies come in, they are listed here by function. Grants and contact revenue is easy to list by program.

Surplus by Program. Revenue minus expense equals surplus. Is the organization generating a surplus in all its programs? Is one program showing a large loss, and can we justify this loss? This data line summarizes the SURPLUS generated by separate programs.

Fund Accounting

Since restricted revenue must be earmarked for the donor's stated gift purpose, nonprofit organizations account separately for expenses by each program funded. This requirement adds complexity to a nonprofit's accounting that is not found in for-profit organization.

When a nonprofit organization accepts restricted revenue, it forms a commercial "contract" with the donor requiring it to spend the revenue as described in the contract. Auditors and the IRS require that the nonprofit organization document this restricted use in its books.

Performance Measurement: Ratios, Benchmarks, & Trends

Most of the financial ratios described in Chapter 13 are applicable to nonprofit organizations as well. Follows a discussion of ratios specifically useful to nonprofits.

Fundraising Expense Ratio is the **FUNDRAISING** expense divided by the **IOTAL REVENUE.** Values of 10% to 30% are normal, depending on the type of solicitation as well as the type of organization and its aggressiveness.

Return on Revenue is the standard profitability ratio computed as increase in NET ASSETS divided by TOTAL REVENUE for a period. I know, I know, nonprofit organizations do not generate profits like forprofit companies do. However, nonprofits have the analogous increase in CHANGE IN NET ASSETS (revenue minus expenses) and call it a surplus. Achieving a surplus will be necessary to grow the size and scope of the organization.

Consistent surplus generation by a nonprofit organization is an indicator of strong financial management. Breakeven results do not allow for breathing room for when things do not go according to plan. Surplus provides that cushion to ride out a slow donation period or to seize a strategic opportunity.

Revenue Reliance Ratio measures how many of your eggs are being carried in one basket. Reliance on just a single income source is risky because it could go away and leave you with nothing to fall back on.

Lower overall risk to the organization's long-term viability is found with a broad base of support from individuals, foundations, and government agencies through contributions and gifts, program services revenue, contracts, and grants.

Self-Sufficiency Ratio measures the PROGRAM SERVICES REVENUE divided by TO-TAL REVENUE. A high ratio means the organization generates enough revenue on its own through program services to sustain itself without gifts and grants.

Overhead Ratio is the percentage of a nonprofit's TOTAL EXPENSES that is devoted to its FUNDRAISING plus MANAGEMENT & GENERAL expenses. There is no "right" percentage here, 15% to 30% is common. Organizations have different strategies of operation and function in different realms.

Donors scrutinize this fundraising ratio. However, we all can agree that the fund-raising and administrative expenses are essential to sustaining the organization. How much to spend, however, is a continuing debate.

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Nonprofit organizations must decide how to measure performance to mission and to the financial performance of actions in support of the mission. In forprofit companies, there is a single ultimate measurement — profits. Things are not so simple for nonprofit organizations.

Key questions to ask and then to answer are:

- 1. Overall, how healthy is our organization today? Is it healthier today than it was three years ago? Why or why not?
- 2. Are our programs sustainable, that is, generating the resources required to meet today's needs without compromising the future?

This book focuses mostly on financial measures of success. Note that an organization faithfully adhering to its mission, but operating with sloppy resource (financial) management, is failing. However, also note that a beautifully run financial operation that strays from its mission is also failing.

Most important decisions made by nonprofit organizations are based, in some material way, on accounting decisions.

Efficient and effective stewardship of monies received in support of mission is the gold standard by which to measure all performance in nonprofits.

Key Performance Indicators

KPIs are quantifiable measurements as well as qualitative written descriptions of a nonprofit organization's health and success. An organization's KPIs are usually benchmarked against peer organizations and commonly recognized business-model ratios.

Different types of nonprofit organizations will use different KPIs. For example: contribution & gift revenue growth compared to fundraising expense, visitor and membership data for a museum, enrollment data for a day care center, number of patients served for a clinic, and so forth.

Graphic "dashboards" are an ideal way to concisely present these KPIs to stakeholders of the organization — both need to know and both care!

Dashboards are a simple, often colorful, graphic representation of KPIs. With dashboards, performance to mission can be seen at a glance. They convey financial and operating information in an easy to understand and difficult to ignore or misinterpret format, riveting attention to what is truly important.

Form 990

IRS Form 990 Return of Organization Exempt from Income Tax is the annual government tax filing required by all nonprofit organizations. Nonprofits do not pay income taxes, but they do provide donors with income tax deductions, so the IRS wants to make sure that everything is on the up-and-up.-

Information in the four major nonprofit financial statement is required plus salary information of the highest paid officers of the nonprofit organization. The form is signed by the organizations chief officer under penalty of perjury.

Additional Resources

See the author's nonprofit finance and governance books:

Nonprofit Accounting & Financial Statements: Overview for Board, Management, and Staff, 2nd Edition, 256 pages, 2017. ISBN-13: 978-0-9971089-6-5

A Picture Book of Nonprofit Financial Statements, 60 pages, 2017 ISBN-13: 978-0-9971089-4-1

An excellent web site providing nonprofit accounting and finance guidance is published by the Greater Washington Society of CPAs (GWSCPA).

The GWSCPA Educational Foundation is a 501c) 3 charitable organization whose mission is to strengthens the nonprofit sector through financial management resources and educates current and future CPAs via continuing professional education and student scholarships.

Visit their website. Use the site search function to research specific topics:

http://www.gwscpa.org/content/about_us/nonprofit_accounting_basics.aspx

Appendix D. Cash Flow Statement Formats

The Cash Flow Statement format that we have been using for Apple-Seed Enterprises' financial statements is a very simple-to-understand cash movement "in and out" presentation. We have likened it to a check register, with the "sources of cash" being deposits and the "uses of cash" being written checks.

However, most accountants would prefer to use another format for cash flow. This format (shown on the next page) is better likened to a "bridge" between the *Balance Sheet* at the start of a period and the *Balance Sheet* at the end of a period.

This bridging format specifically shows the asset, liability and equity accounts that change to provide cash, and the accounts that change when using cash.

Most of the time when you look at financial statements you will see a statement like the one on the next page. Both formats allow you to get to the same answer, *Ending Cash Balance*, but in different ways. The format introduced here focuses on cash movements divided into three major categories of interest to anyone reviewing the cash performance of a business:

- 1. Cash Flows from Operations This section shows cash sources and uses from activities such as making and selling products, the company's "operations."
- 2. **Cash Flows from Investing** This section shows uses of cash by the company to purchase productive assets such as property, plant and equipment.

	Balance Sheet	as of T19	as of T31	T31 less T19
	CASH	\$ 588,220	\$ 488,462	\$ (99,758)
	ACCOUNTS RECEIVABLE	-	454,760	454,760
	INVENTORIES	577,970	414,770	(163,200)
	PREPAID EXPENSES	-	-	-
1	CURRENT ASSETS	1,166,190	1,357,992	191,802
Assets	OTHER ASSETS	-	-	-
٩	FIXED ASSETS @ COST	1,750,000	1,750,000	-
	ACCUMULATED DEPRECIATION	14,286	78,573	64,287
	NET FIXED ASSETS	1,735,714	1,671,427	(64,287)
	TOTAL ASSETS	2,901,904	3,029,419	127,515
	ACCOUNTS PAYABLE	\$ 469,204	\$ 236,297	\$ (232,907)
Œ	ACCRUED EXPENSES	18,480	26,435	7,955
Equity	CURRENT PORTION OF DEBT	100,000	100,000	-
	INCOME TAXES PAYABLE	-	139,804	139,804
∞ŏ	CURRENT LIABILITIES	587,684	502,536	(85,148)
Liabilities	LONG-TERM DEBT	900,000	800,000	(100,000)
≡	CAPITAL STOCK	1,550,000	1,550,000	_
귤	RETAINED EARNINGS	(135,780)	176,883	312,663
≔	SHAREHOLDERS' EQUITY	1,414,220	1,726,883	312,663
	TOTAL LIABILITIES & EQUITY	\$ 2,901,904	\$ 3,029,419	\$ 127,515

The figure at the left shows the computation of the difference between *Balance Sheet* **T19** and **T31** account values to be used in constructing the *Statement of Cash Flows* on the next page.

Statement of Cash Flows — T19 thru T31

CASH FLOWS FROM OPERATING AC	SIIVIIIES
Net Income	\$387,6

Net Income	\$387,662	(Note 1)
Adjustments to reconsile net income	to cash used	in operations.
Depreciation	64,287	(Note 2)
Changes in working capital.		
Accounts Receivable	(454,760)	(Note 3)
Inventories	163,200	(Note 3)
Prepaid Expenses	\$0	(Note 4)
Accounts Payable	232,907	(Note 4)
Accrued Expenses	7,955	(Note 4)
Income Taxes Payable	139,804	(Note 4)
Cash Used in Operations	\$75,242	

CASH FLOWS FROM FINANCING ACTIVITIES

PP&E Purchases	\$0	(Note 5)
Cash Used in Investing Activities	\$0	

CASH FLOWS FROM FINANCING ACTIVITIES

2ale of 2lock	\$ 0	(Note 6)
Change in Debt	(100,000)	(Note 7)
Dividends Paid	(75,000)	(Note 4)
Cash from Financing Acticvities	\$175,000	
Net Increase (Decrease) in Cash	(99,758)	(T19 thru T31)
Beginning Cash	588,220	(as of T19)

\$488,462

(as of T31)

3. Cash Flows from Financing

ENDING CASH

This section shows cash received by the company from selling stock to investors, borrowing money from a bank, and uses such as paying dividends or repaying loans

If we look on page 143 at Apple-Seed's *Cash Flow Statement* for Transaction 19, we see \$588,220 as an ending cash balance. Looking at AppleSeed's *Cash Flow Statement* for Transaction 31 on page 17, we see \$488,462 as an ending cash balance. Subtracting the earlier from the later cash balance, we see that in the time between these two transactions, cash has dropped by \$99,758.

Review the following notes to see how this "bridging" cash flow statement is constructed. Note 1. Income for the period is computed from the *Income Statements* by subtracting NET INCOME as of Transaction 19 (\$135,780 loss) from NET INCOME as of Transaction 31 (\$251,883 profit).

Note 2. Computed as change in Accumulated Depreciation. Depreciation does not affect cash flow, but because it has been subtracted from the NET INCOME for the period, it must be added back here to get a true picture of cash movements.

Note 3. Computed as the change in these asset accounts. Note that an increase in an asset account means the company has more working capital and a positive cash flow in that account.

Note 4. Computed as the change in these liability accounts. Note that an increase in a liability account means the company has less working capital and a negative cash flow in that account.

Note 5. Computed as change in **PROPERTY**, **PLANT & EQUIPMENT** assets. An increase in **PP&E** takes cash.

Note 6. Computed as the change in the CAPITAL STOCK account of Shareholders' Equity.

Note 7. Computed as the change in the CURRENT PORTION
OF DEBT and LONG-TERM DEBT accounts. Lowering of overall debt decreases cash. Increasing overall debt increases cash.

Note 8. Dividends paid to shareholders lowers cash.

Appendix E. Debits and Credits

The Olden Days

Back in the olden days when systematic accounting and statement presentation was first developed, the monks would write down each and every transaction as they occurred. Literally, "the books" of a company were just that, the books containing a company's financial records!

The concept of *debits* and *credits* was invented to: (a) structure the layout of the books for everyone to understand, (b) aid the monks in classifying and recording transactions properly, and (c) catch manual transcribing errors.

The term debit comes from the Latin word *debitum*, meaning "what is due," and credit comes from the Latin *creditum*, defined as "something entrusted to another or a loan." The logic is that when you increase assets, the change in the asset account is a debit, because something must be due to pay for that increase (i.e. the cost of the asset in cash that would be entered as a credit in the cash account).



Double-Entry Bookkeeping

Debits and credits are terms first coming into used 500 years ago. Luca Pacioli, a Franciscan monk, developed the concepts underlying double entry bookkeeping. The monks would prepare books (called ledgers) with one account on each page. They would write down a description of the transaction and then put the transaction dollar amount in one of two columns at the right on the page.

The first column was labeled debit and the next column was labeled credit. Note, there was often a third column on the page with a running total for the account.

"Do not end your workday until your debits equal your credits."

Luca Pacioli,

Franciscan monk, the "Father of Accounting"

Every accounting transaction had to have a credit entry on one account page and a debit entry on another account page. Hence, *double entry bookkeeping*. Thus, when a transaction is entered with these two entries, the financial statement will remain in balance according to the general equation of accounting: *Assets* = *liabilities* + *equity*.

Double entry and debits and credits are still used by bookkeepers when they manually record financial transactions in the company's record books. This double-entry system reduces clerical errors. Since the books must always balance. The total debits must always equal the total credits after you post the journal entries to the ledger accounts. If the amounts do not balance, you have made an error and you must find and correct it.

Bookkeepers and accountants still find the concept of debit and credit useful and standard accounting courses still teach this basic debit/credit structure. However, you will not find it used in this book because debit and credit nomenclature is:

- 1. often counterintuitive and thus confusing for nonaccountants,
- not necessary to have a grasp of financial statement required for non-financial managers, and
- computerization of accounting records has made catching mistakes when manually entering numbers less necessary.

Accounting is done with computer's now and database rules govern where amounts are placed in virtual ledgers. But since bookkeepers and accountants use these terms debit and credit all the time, in this appendix we will attempt to give you just enough understanding to be able to converse intelligently with the accounting types in your organization.

Transaction Entries

A double-entry bookkeeping system uses journal books (with chronological entries) and ledger books (with separate account-by-account pages), to record the transaction descriptions and associated

debit and credit amounts. The so-called General Journal contains a record of all transaction in chronological order with a unique sequence number to forever remember them and tie the transaction to entries in the account ledgers. Makes finding errors easier.

Transactions are first entered in a journal and then posted to ledger accounts. These accounts show income, expenses, assets (property a business owns), liabilities (debts of a business), and net worth (excess of assets over liabilities).

In the double-entry system, each account has a left side column for debits and a right side column for credits. It is self-balancing because you record every transaction as a debit entry in one account and as a credit entry in another.

Whether a debit increases or decreases an account depends on the type of account. The basic principle is that the account receiving benefit is "debited" and the account giving benefit is "credited."

For instance, an increase in an asset account is a debit. An increase in a liability or equity account is a credit. An increase in a sales account is a debit. An increase in an expense account is a credit. As an example: paying off a debt "benefits" the liability section of the *Balance Sheet*. The entry lowers the reported numeric value. Thus, the entry is a *debit*.

See the summary table following.

Whether a DEBIT increases or decreases an account depends on the type of account. The basic principle is that the account *receiving benefit* is "debited" and the account *giving benefit* is "credited."

For instance, an increase in an asset account is a debit. An increase in a liability or equity account is a credit. An increase in a sales account is a debit. An increase in an expense account is a credit.

Effects of Debits and Credits

ACCOUNT TYPE	EFFECT OF A DEBIT ENTRY ON ACCOUNT	EFFECT OF A CREDIT ENTRY ON ACCOUNT
	\$ VALUE	\$ VALUE
Asset	↑	+
Liability	+	↑
Equity	+	↑
Sales	↑	+
Expense	↑	+

The secret of assigning and recording numeric values correctly into the debit or credit column in the account ledgers is to determine whether the account actually "benefits" from the entry.

Some Rules of Thumb

Generally, these types of accounts are increased with a debit and decreased by a credit:

- expenses
- assets
- retained earnings or losses.

Generally, these types of accounts are decreased with a debit and increased by a credit:

- income
- revenue
- liabilities
- equity

Here is another useful way to look at cash, revenue, and expense accounts. Remember, if you credit an account you need to debit another account and vice versa.

- When cash is received, debit the CASH account.
- When cash is paid out, credit the CASH account.
- When revenues are earned, credit a **REVENUE** account.
- When expenses are incurred, debit an EXPENSE account.

Still Confused?

Don't worry too much. You are not the bookkeeper or accountant. You can still understand financial statements and use them to run your business.