

The primary objective of accounting is measuring the **net income** of the businesses according to the generally accepted accounting principles.

## Net Income

- net increase in the owner's equity that results **from the operations of the company**
- Net Income = revenues - expenses

To satisfy **matching rule** we use:

## Accrual Accounting

- record the financial effects in the periods in which the transactions occur
- done by two ways:
  - 1 by recording revenues when earned and expenses when incurred
  - 2 by adjusting accounts

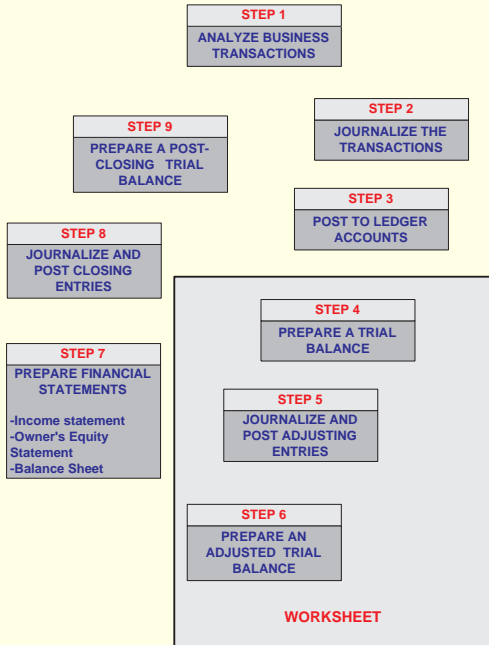
Accountants use **Adjusting Entries** to apply accrual accounting to transactions that span over multiple accounting periods.

## The Adjustment Entries

- have at least one permanent account (balance sheet) and at least one temporary account (income sheet)
- never involve cash account
- There are two main types of adjustments:
  - 1 **Deferral** is the postponement of the recognition of an expense already paid/incurred or postponement of a revenue already received
    - used in costs or revenues that are recorded but must be proportioned between two or more accounting periods
  - 2 An **Accrual** is the recognition of a revenue or expense that has arisen but not yet been recorded
    - when a fee is earned or a wage expense is incurred but not recorded

The purpose of the accounting system is to treat the business transactions as raw material and develop the finished product of accounting - **financial statements** - in a systematic way. The steps followed in the accounting cycle are:

- 1 Transactions are analyzed from the source documents,
- 2 Transactions are recorded in the **journal**,
- 3 Entries are posted to **ledger**,
- 4 Accounts are **adjusted** at the end of the period with the help of **work sheet**,
- 5 **Financial statements** are prepared from work sheet,
- 6 The accounts are **closed** to conclude the current period.

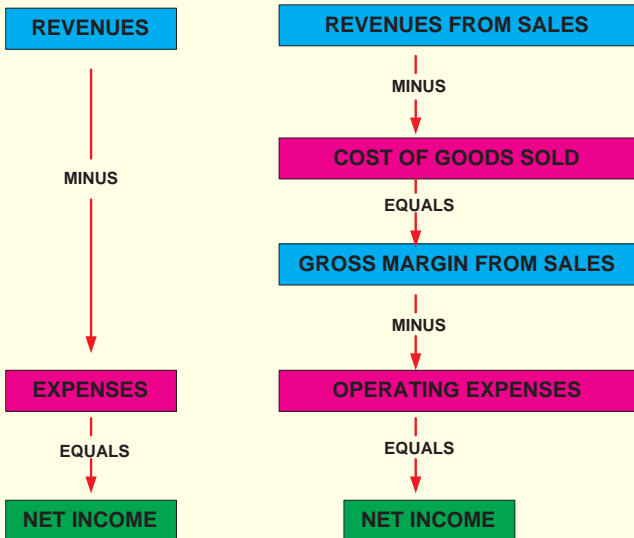


So far we see the accounting practices in **service companies** such as advertising and realty agencies

- Simple calculation techniques for the net income of these businesses
- $\text{Net income} = \text{revenues} - \text{expenses}$ .

## Merchandising companies

- earn income by buying and selling products or merchandise
  - Wholesaler
  - Retailer
- buying and selling of merchandise complicates the calculation of net income
- The income statement for the merchandising companies include:
  - 1 revenues from sales
  - 2 the cost of goods sold
  - 3 operating expenses



- **Revenues from sales** arise from sales of goods by the merchandising company
- **Cost of Goods Sold** tells how much merchant paid for the goods that were sold.
- Revenues from sales – Cost of Goods Sold = **gross margin from sales (or gross margin)**
- For sufficient income; gross margin > operating expenses
- Operating expenses are expenses **other than cost of goods**, that are incurred in running the business
- **Net income** for merchandising companies = **Gross Margin - Operating Expenses**

The first part of the merchandising Income Statement is **Revenues from Sales**.

*ACME Company*  
*Partial Income Statement*  
*For the month Ended September 30, 2008*

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<b>Revenues from Sales</b>		
<i>Gross Sales</i>		\$246,350
<i>Less: Sales Returns &amp; Allow.</i>	\$2,750	
<i>Sales Discounts</i>	4,275	7,025
<i>Net Sales</i>		\$239,325

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## Revenues from Sales

- 1 first part of the merchandising income statement
- 2 requires the calculation of **net sales**
- 3 **Net Sales** = Gross Sales – Sales Returns and Allowances – Sales Discounts.

Under the **accrual accounting**, the revenues from the sale of merchandise are recorded in the accounting period in which the ownership of the the goods passes to the buyers.

## Gross sales

- Total sales for **cash** and **on credit** during a given accounting period
- **Sales** account is used to record the sales of merchandise
- Merchandise sold is credited to the Sales Account at the gross sales price (similar to an **revenue** account)

Assume that on March 16, Norton Fashion Company sells \$1,286 worth of merchandise for cash (on credit). The journal entry will look like:

Date		Description	Post Ref.	Debit	Credit
2007 Mar.	16	Cash (Accounts Receivable) Sales Sale of merchandise for cash (on credit)		1,286	1,286

Cash	
Mar.16	1,286

Sales	
Mar.16	1,286

## Sales Returns and Allowances

- When a customer receives a defective or unsatisfactory item; seller
  - 1 may allow the buyer to return the item for a cash refund or credit on account
  - 2 give the buyer an allowance off the sale price
- Each return or allowance is recorded as a debit to the **Sales Returns and Allowances** account. (**Not a debit to Sales Account**)
- Allows management to see return & allowances amount during a period
- Contra-revenue account
- Its debit balance is deducted from gross sales in the income statement

Assume that on March 17, Norton Fashion Company receives a sale return of \$76 worth of merchandise due to defectiveness. The journal entry will look like:

Date		Description	Post Ref.	Debit	Credit
2007 Mar.	17	Sales Returns and Allowances Cash (Accounts Receivable) Sales Return received		76	76

Cash			
Mar.16	1,286	Mar.17	76

Sales Returns and Allowances			
Mar.17	76		

Sales			
		Mar.16	1,286

## Sales Discounts

- When the goods are sold on credit, both parties agree on the amount and timing of the payment
- The terms are usually marked on the sales invoice
- The invoice marked with "n/10" is read as net ten-means the amount of the invoice is due ten days
- Firms give sale discounts for early payment, to increase the firm's liquidity by reducing the money tied up in accounts receivable
- Invoice Term Example: "2/5, n/10" means buyer will take 2 percent discount if he pays within the next five days, otherwise can wait ten days and pay the full amount
- Because it is not possible to know at the time of sale whether the customer will take advantage of the discount or not
  - Sales discounts are recorded at the time customers pay

Assume Norton Fashion Company sells merchandise on March 20 for \$300 to a customer on the terms of "2/10, n/60". Its corresponding journal entry is:

Date		Description	Post Ref.	Debit	Credit
2007 Mar.	20	Accounts Receivable		300	
		Sales			300
		Sale of merchandise, on credit terms 2/10, n/60			

Accounts Receivable	Sales
Mar.20   300	Mar.16   1,286
	Mar.20   300

## CAUTION

- If the customer pays before or at March 30, discount is taken
- Sales discounts are recorded only at the time of payment

Customer decided to pay for the merchandise on March 29. Therefore the entry is:

Date		Description	Post Ref.	Debit	Credit
2007 Mar.	29	Cash		294	
		Sales Discount		6	
		Accounts Receivable			300
		Payment for March 20, sale discount taken (terms were 2/10, n/60)			

Accounts Receivable			
Mar.20	300	Mar.29	300

Sales Discount	
Mar.29	6

Cash			
Mar.16	1,286	Mar.17	76
Mar.29	294		

Sales	
Mar.16	1,286
Mar.20	300

Sales discount is a **contra-revenue** account, which means its debit balance is deducted from gross sales in the income statement.

The second part of the merchandising Income Statement is **Cost of Goods Sold**.

*ACME Company, Partial Income Statement  
For the month Ended September 30, 2008*

**Cost of Goods Sold**

<i>Merchandise Inventory, September 1</i>			\$52,800
<i>Purchases</i>		\$126,400	
<i>Less: Purchases Returns &amp; Allow.</i>	\$5,640		
<i>Purchases Discounts</i>	2,136	7,776	
			\$118,624
<i>Freight In</i>		8,236	
<i>Net Purchases</i>			126,860
<i>Goods Available for Sale</i>			\$179,600
<i>Less: Merchandise Inventory, September 30</i>			48,300
<i>Cost Of Goods Sold</i>			<u>131,360</u>



## Cost of Goods Sold

- Every merchandising business has goods on hand that it holds for sale to customers
- The amount of goods on hand at any one time is known as the **Merchandise Inventory**.
- Cost of **Goods Available for Sale** = Beginning Merchandise Inventory + Net Purchases
- **Cost of Goods Sold** = Goods Available for Sale – Ending Merchandise Inventory

### Net Purchases?

Net Purchases = Gross Purchases – Purchases Discounts  
– Purchases Returns and Allowances + Freight In

## Purchases

Merchandise bought for resale is debited to the Purchases Account at the gross purchase price (similar to an **expense** account)

Suppose Norton Company purchased \$1,500 worth of merchandise on May 12 on terms "2/10, n/30".

Date		Description	Post Ref.	Debit	Credit
2007 May	12	Purchases Accounts Payable Purchase of merchandise, on terms 2/10, n/30		1,500	1,500

Accounts Payable

May 12 1,500

Purchases

May 12 1,500

The temporary purchases account is only used to record the merchandise purchases for **resale** (Not other assets) during an accounting period.

## Purchases Returns and Allowances

- Firm may have to return the merchandise acquired for resale
- Supplier can offer a full credit on the goods or an allowance as an alternative
- Transactions are recorded in the Purchases Returns and Allowances account.
- Used only for returns & allowances for merchandise bought for resale
- Allows management to easily see the record of returns and allowances
- A contra-purchases (expense) account
- Its balance is subtracted from purchases in the income statement

Suppose on May 14, Norton Fashion Company returned \$200 worth damaged merchandise bought on May 12.

Date		Description	Post Ref.	Debit	Credit
2007 May	14	Accounts Payable <i>Purchases Returns and Allow.</i> <i>Return of damaged, bought on May 12</i>		200	200

Accounts Payable			
May 14	200	May 12	1,500

Purchases Returns and Allow.			
		May 14	200

Purchases			
May 12	1,500		

## Purchases Discounts

- Merchandise purchases are mostly made on credit
- commonly involve the purchases discounts for early payment.
- Purchase discounts are credited to Purchases Discount Account
- Its a contra-purchases (expense) account
- Allows management to see the discount amount from purchases during a period
- Its balance is deducted from purchases in the income statement

Assume that the full amount of the credit purchase on May 12 will be closed at May 22. The transaction will look like:

Date		Description	Post Ref.	Debit	Credit
2007 May	22	<i>Accounts Payable</i> <i>Purchases Discounts</i> <i>Cash</i> <i>Paid the invoice of May 12,</i> <i>Purchase May 12: 1,500</i> <i>Less Return May 14: 200</i> <i>Net Purchase 1,300</i> <i>on terms 2/10, n/30</i>		1300	26 1,274

### Accounts Payable

May 14	200	May 12	1,500
May 22	1,300		

### Purchases Discounts

May 22	26
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### Cash

Mar.16	1,286	Mar.17	76
Mar.29	294	May 22	1,274

## Freight In

For some industries, it is customary for purchaser to pay transportation charges on merchandise. These charges are accumulated in the Freight In account. Logically included in cost of purchases. (Similar to an **expense** account it is **debited for increases**)

Assume Norton Fashion Company paid \$134 in cash for Freight In cost for the May 12 purchase.

Date		Description	Post Ref.	Debit	Credit
2007 May	12	Freight In Cash <i>Incurred freight cost, for merchandise</i>		134	134

### Cash

Mar.16	1,286	Mar.17	76
Mar.29	294	May 22	1,274
		May 12	134

### Freight In

May 12	134
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## Merchandise Inventory

- The inventory of a merchandising company consists of the goods on hand that are ready for sale
- Merchandising inventory on hand at the beginning of the accounting period is called the **beginning inventory**
- Merchandising inventory on hand at the end of the accounting period is called the **ending inventory**
- These two values are used in the calculation of the cost of goods sold
- $\text{Cost of Goods Sold} = \text{Purchases} + \text{Beginning Inventory} - \text{Ending Inventory}$
- Also the ending inventory will be on the balance sheet as an asset
- This period's beginning inventory was last period's ending inventory value



## Measuring Merchandise Inventory

- Merchandise inventory represents goods available for sale that are still unsold
- Methods for determining both the quantity and the cost of goods on hand
  - 1 Periodic Inventory System
  - 2 Perpetual Inventory System

## In Periodic Inventory System

- Inventory on hand is counted periodically, usually at the end of an accounting period; no detailed record hold during the period
- Cost of inventory purchased is accumulated in the a Purchases account
- By the actual count of the physical inventory, ending inventory found
- $\text{Cost of Goods Sold} = \text{Purchases} + \text{Beginning Inventory} - \text{Ending Inventory}$

## Perpetual Inventory System

- Cost of each item is debited to the Merchandise Inventory account as it is purchased
- As items are sold, Merchandise Inventory account is credited, and the cost of goods sold account is debited
- Merchandise Inventory account shows the cost of goods on hand at a point in time
- Cost of goods sold account shows the cost of items sold to that point in time
- Purchases account is not used in this system.

Companies selling items of **low value** at **high volume** use periodic inventory system. We focus on **periodic inventory system** in our course. (ex. drug stores, department stores, etc.)

## Merchandise Inventory in Periodic Inventory System

Most companies rely on actual count of goods on hand at the end of the accounting period

- to determine the ending inventory
- to calculate indirectly the cost of goods sold

The steps in calculating the ending merchandise inventory in Periodic Inventory System:

- 1 Make a physical count of inventory at the end of the period.
- 2 Multiply the quantity of each type of merchandise by its unit cost.
- 3 Add the resulting cost of each type to find a total.

Entries are made at the end of accounting period

- to remove the beginning inventory from the Merchandise Inventory
- to enter the ending inventory to the Merchandise Inventory
- These entries are the **ONLY** ones made to **Merchandise Inventory** account during the period in Periodic Inventory System

At the end of the accounting period; our objectives in handling of the merchandise inventory is:

- 1 remove the beginning inventory from the merchandise inventory account
- 2 enter the ending balance into the merchandise inventory account
- 3 enter the beginning inventory inventory as a debit and the ending inventory as a credit to the income summary account to calculate net income.

Let's assume that Norton Fashion Company's beginning inventory is \$52,800 on Jan 1, 2007 and ending inventory is \$48,300 on Dec 31, 2007. So if the following entries are made:

Merchandise Inventory			
Jan.1	52,800	Dec.31	52,800
Dec.31	48,300		

Income Summary			
Dec.31	52,800	Dec.31	48,300

- 1 Adjustment of \$52,800 removes the beginning inventory balance from the merchandise inventory, and transfers it to the debit side of the income summary
  - To correct side since in the cost of goods sold calculation we add beginning inventory to the net purchases
  - Like an expense account net purchase account will be closed to the debit side of the income summary
- 2 The second adjustment of \$48,300 enters the ending balance to the merchandise inventory
  - Transfers the ending inventory to the credit side of the income summary account
  - Creating a subtraction effect from net purchases plus beginning inventory balance

## In Worksheet

The debit and credit adjustments in Income Summary related to Merchandise Inventory are extended to both adjusted trial balance and Income statement without calculating a net credit/debit balance, since these values are needed for CGS calculation at Income Statement.

## Operating Expenses

- Last major part of the income statement for a merchandising concern
- These are the expenses, other than the cost of goods sold, that are necessary to run the business
- It is customarily divided into categories
- Selling expenses and the general and administrative expenses are two common categories
- Selling expenses include:
  - Cost of storing
  - Cost of displaying
  - Cost of advertisement
  - Cost of promotions
  - Cost of delivery
  - Cost of making sales

## ACME Company, Partial Income Statement - For the month Ended September 30, 2008

Gross Sales			\$246,350
Less: Sales Returns & Allow.		\$2,750	
Sales Discounts		4,275	7,025
			<u>          </u>
Net Sales			\$239,325
<b>Cost of Goods Sold</b>			
Merchandise Inventory, September 1			\$52,800
Purchases		\$126,400	
Less: Purchases Returns & Allow.	\$5,640		
Purchases Discounts	2,136	7,776	
			<u>          </u>
		\$118,624	
Freight In		8,236	
			<u>          </u>
Net Purchases			126,860
			<u>          </u>
Goods Available for Sale			\$179,600
Less: Merchandise Inventory, September 30			48,300
Cost Of Goods Sold			<u>          </u>
			131,360
			<u>          </u>
<b>Gross Margin From Sales</b>			\$107,965
<b>Operating Expenses</b>			
Sales Salaries Expense		\$22,500	
Freight Out Expense		5,740	
Advertising Expense		10,000	
Rent Expense		1,600	
Insurance Expense, Selling		1,540	
Total Selling Expenses			\$41,380
Total General and Administrative Expenses			37,104
			<u>          </u>
Total Operating Expenses			78,484
			<u>          </u>
<b>Net Income</b>			\$29,481

Enter this information to the worksheet knowing the following:

<i>Jan Party Supplies Company</i>		
<i>Trial Balance</i>		
<i>September 30, 2008</i>		
<i>Cash</i>	\$21,150	
<i>Accounts Receivable</i>	74,490	
<i>Merchandise Inventory</i>	214,200	
<i>Store Supplies</i>	11,400	
<i>Prepaid Insurance</i>	14,400	
<i>Store Equipment</i>	153,900	
<i>Accumulated Depreciation, Store Equipment</i>		\$76,500
<i>Accounts Payable</i>		116,850
<i>Jan, Capital</i>		484,050
<i>Jan, Withdrawals</i>	72,000	
<i>Sales</i>		1,125,750
<i>Sales Returns and Allowances</i>	14,070	
<i>Sales Discounts</i>	11,370	
<i>Purchases</i>	754,800	
<i>Purchases Returns and Allowances</i>		9,450
<i>Purchases Discounts</i>		8,700
<i>Freight In</i>	31,200	
<i>Sales Salaries Expense</i>	193,800	
<i>Rent Expense</i>	144,000	
<i>Other Selling Expense</i>	98,730	
<i>Utility Expense</i>	11,790	
	1,821,300	1,821,300



We are given the following information:

- 1 Ending merchandise inventory, \$266,700
- 2 Ending store supplies inventory, \$1,650
- 3 Expired Insurance, \$7,200
- 4 Sales salaries payable, \$1,950
- 5 Accrued utility expense, \$300.
- 6 Estimated depreciation on the store equipment, \$15,000

1. Ending merchandise inventory, \$266,700:

Merchandise Inventory			
Sep.1	214,200	Sep.30	214,200
Sep.30	266,700		

Income Summary			
Sep.30	214,200	Sep.30	266,700

2. Ending store supplies inventory, \$1,650:

Store Supplies			
Sep.1	11,400	Sep.30	9,750

Store Supplies Expense			
Sep.30	9,750		

3. Expired Insurance, \$7,200:

Prepaid Insurance	
Sep.30 14,400	Sep.30 7,200

Insurance Expense	
Sep.30 7,200	

4. Sales salaries payable, \$1,950:

Sales Salaries Payable	
	Sep.30 1,950

Sales Salaries Expense	
Sep. 30 193,800	
Sep.30 1,950	

5. Accrued utility expense, \$300:

Accounts Payable	
	Sep.30 116,850
	Sep.30 300

Utility Expense	
Sep.30	11,790
Sep.30	300

6. Estimated depreciation on the store equipment, \$15,000:

Accumulated Depreciation, Store Equip.	
	Sep.30 76,500
	Sep.30 15,000

Depreciation Expense, Store Equip.	
Sep.30	15,000

Account Names	Trial Balance		Adjustments		Adjusted Trial Balance	
	Debit	Credit	Debit	Credit	Debit	Credit
Cash	\$21,150				21,150	
Accounts Receivable	74,490				74,490	
Merchandise Inventory	214,200		266,700	214,200	266,700	
Store Supplies	11,400			9,750	1,650	
Prepaid Insurance	14,400			7,200	7,200	
Store Equipment	153,900				153,900	
Accumulated Depreciation, Store Equipment		\$76,500		15,000		91,500
Accounts Payable		116,850		300		117,150
Jan, Capital		484,050				484,050
Jan, Withdrawals	72,000				72,000	
Sales		1,125,750				1,125,750
Sales Returns & Allow.	14,070				14,070	
Sales Discounts	11,370				11,370	
Purchases	754,800				754,800	
Purchases Returns & Allow.		9,450				9,450
Purchases Discounts		8,700				8,700
Freight In	31,200				31,200	
Sales Salaries Expense	193,800		1,950		195,750	
Rent Expense	144,000				144,000	
Other Selling Expense	98,730				98,730	
Utility Expense	11,790		300		12,090	
	1,821,300	1,821,300				
<i>Income Summary</i>			214,200	266,700	214,200	266,700
Store Supplies Expense			9,750		9,750	
Insurance Expense			7,200		7,200	
Depreciation Expense, Store Equipment			15,000		15,000	
Sales Salaries Payable				1,950		1,950
			515,100	515,100	2,105,250	2,105,250

Account Names	Adj. Trial Balance		Income Statement		Balance Sheet	
	Debit	Credit	Debit	Credit	Debit	Credit
Cash	21,150				21,150	
Accounts Receivable	74,490				74,490	
Merchandise Inventory	266,700				266,700	
Store Supplies	1,650				1,650	
Prepaid Insurance	7,200				7,200	
Store Equipment	153,900				153,900	
Accumulated Depreciation, Store Equipment		91,500				91,500
Accounts Payable		117,150				117,150
Jan, Capital		484,050				484,050
Jan, Withdrawals	72,000				72,000	
Sales		1,125,750		1,125,750		
Sales Returns & Allow.	14,070		14,070			
Sales Discounts	11,370		11,370			
Purchases	754,800		754,800			
Purchases Returns & Allow.		9,450		9,450		
Purchases Discounts		8,700		8,700		
Freight In	31,200		31,200			
Sales Salaries Expense	195,750		195,750			
Rent Expense	144,000		144,000			
Other Selling Expense	98,730		98,730			
Utility Expense	12,090		12,090			
<b>Income Summary</b>	<b>214,200</b>	<b>266,700</b>	<b>214,200</b>	<b>266,700</b>		
Store Supplies Expense	9,750		9,750			
Insurance Expense	7,200		7,200			
Depreciation Expense, Store Equipment	15,000		15,000			
Sales Salaries Payable		1,950				1,950
	2,105,250	2,105,250	1,508,160	1,410,600	597,090	694,650
Net Income				97,560	97,560	
			1,508,160	1,508,160	694,650	694,650

Jan Party Supplies Company Income Statement For the month Ended September 30, 2008**Revenues from Sales**

Gross Sales		\$1,125,750
Less: Sales Returns & Allow.	\$14,070	
Sales Discounts	11,370	25,440
		<u>25,440</u>
Net Sales		\$1,100,310

**Cost of Goods Sold**

Merchandise Inventory, September 1		\$214,200
Purchases	\$754,800	
Less: Purchase Returns & Allow.	\$9,450	
Purchase Discounts	8,700	18,150
		<u>18,150</u>
	\$736,650	
Freight In	31,200	
		<u>31,200</u>
Net Purchases		767,850
		<u>767,850</u>
Goods Available for Sale		\$982,050
Less: Merchandise Inventory, September 30		266,700
Cost Of Goods Sold		715,350
		<u>715,350</u>

**Gross Margin From Sales**

\$384,960

**Operating Expenses**

Sales Salaries Expense	\$195,750	
Other Selling Expense	98,730	
Utility Expense	12,090	
Rent Expense	144,000	
Insurance Expense	7,200	
Store Supplies Expense	9,750	
Depreciation Expense,	15,000	
Total Operating Expenses		482,520
		<u>482,520</u>

**Net Loss**

\$97,560