### SECTION 2: Manipulating Profit Variables: Merchandising for a Profit

## Part 2: Skeletal Profit and Loss Statement: Calculating the P & L Components

### Part 2: 2-7 Interrelationships Among Components

After studying the various components of the skeletal P & L Statement, it should be evident that all of these components are interrelated. Thus, if one component changes, either upward or downward, other components will be impacted. For example, if operating expenses increase then a chance exists that the retailer could have a loss on the bottom line, rather than the profit expected. Or, if net sales decrease and cost of goods sold increase, there will be a major impact on the amount of gross margin. If this occurs the retailer must evaluate and monitor operating expenses in order to assure that the store is profitable.

Net sales encompass cost of goods sold and gross margin, while operating expenses and (net) operating profit are subcomponents of gross margin and like the retail price components, all of these components are expressed in both dollars and percents. Usually there is a combination of dollars and percents with which the retailer must work to calculate the unknown quantity in order to construct the P & L Statement.

Since net sales are always 100 % on the P & L statement, net sales are the base for the calculations. Remember, if using a pie chart, the entire space of the chart would be net sales. Thus, all of the other components are a ratio or percent of net sales.

In order to calculate the dollar amount of any component on the P & L Statement, when net sales dollars are known and any component percentage is known, use the following formula:

Component \$ = Nets Sales \$ × Component %

OR

Cost of Goods Sold \$ = Net Sales \$ × Cost of Goods Sold %

Gross Margin \$ = Net Sales \$ × Gross Margin %

Operating Expense \$ = Net Sales \$ × Operating Expense %

(Net) Operating Profit \$ = Net Sales \$ × Operating Profit %

Example: Calculate (net) operating profit dollars with figures provided below:

# Example Figures for calculating the skeletal P & L Statement

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Gross Sales = \$210,000.00	Customer Returns & Allowances = \$10,000.00
Net Sales = \$200,000.00	Cost of Goods Sold = \$116,000.00
Gross Margin = \$84,000.00	Operating Expenses = \$72,000.00
(Net) Operating Profit = \$12,000.00	

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(Net) Operating Profit $ = ?
Net Sales $ = $200,000.00
(Net) Operating Profit % = 6.00 %

(Net) Operating Profit $ = ?
(Net) Operating Profit $ = Net Sales $ × (Net) Operating Profit %
(Net) Operating Profit $ = $200,000.00 × 6.00 % (.06)
(Net) Operating Profit $ = $12,000.00
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Note that the percentage of a component must always be used to calculate the dollar amount for that same component.

On the other hand, the retailer might need to determine net sales dollars needed in order to meet planned margin goals. If both the dollar amount and percentage of any component or a matched pair of components are known, net sales can be calculated. Specifically, if both the dollar and percentage for cost of goods sold, or gross margin, or operating expenses, or (net) operating profit are known, then any of these with matched components may be used to calculate net sales.

Use the following formula for calculating net sales dollars when the dollar amount and percent of any one component is known.

Net Sales \$ = Component \$ ÷ Component %

**Example:** Calculate net sales dollars with figures provided below:

#### Example Figures for calculating the skeletal P & L Statement

Gross Sales = \$210,000.00	Customer Returns & Allowances = \$10,000.00
Net Sales = \$200,000.00	Cost of Goods Sold = \$116,000.00
Gross Margin = \$84,000.00	Operating Expenses = \$72,000.00
(Net) Operating Profit = \$12,000.00	

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Net Sales $ = ?

Cost of Goods Sold $ = $116,000.00

Cost of Goods Sold % = 58.00%

Net Sales $ = Cost of Goods Sold $ ÷ Cost of Goods Sold %

Net Sales $ = $116,000.00 ÷ 58.00% (.58)

Net Sales $ = $200,000.00
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In summary, the retailer usually works with a combination of information or data to create the planned P & L Statement for the next retail year. This statement is then used to compare the plan to actual happenings reported on the retailer's most current P & L Statement. From this analysis, the retailer can adjust operating procedures, thereby running a profitable business. Hence, on any given day in a retail business, many formulas must be used in order to provide solutions to solve daily business problems or to provide answers for unresolved questions.

The final part of this section will address how adjusting the four profit variables of retail price, sales volume, cost of goods sold, and operating expenses, impact the retailer's bottom line.