

SECTION 2: Manipulating Profit Variables: Merchandising for a Profit

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

Part 2: 2-4 Gross Margin

Gross Margin is the difference between net sales and total cost of goods sold. Gross margin is based on the achieved markup and the net sales dollars figure. The dollar amount of gross margin must be large enough to cover both operating expenses and (net) operating profit. Otherwise, the store will incur a loss! If gross margin is not greater than operating expenses, the retailer is “in the red” and has a loss. On the P & L Statement, a loss is shown as a dollar amount and percentage, with both recorded in parentheses. If gross margin is greater than operating expenses, the retailer is “in the black” or has realized (net) operating profit.

Operating expenses include direct and controllable expenses, and fixed and indirect expenses, as well as variable expenses that the store incurs during the day-to-day business operations. (Net) Operating profit is the result of subtracting the total, or all operating expenses, from gross margin. Gross Margin will be discussed in more detail in *Part 3: 3-5* of this section.

Formulas for calculating gross margin dollars and percent, while taking into consideration that operating expenses and profit must be covered by gross margin, is expressed as follows:

$$\text{Gross Margin \$} = \text{Operating Expenses \$} + (\text{Net) Operating Profit \$}$$

$$\text{Gross Margin \%} = \text{Operating Expenses \%} + (\text{Net) Operating Profit \%}$$

Problem: Calculate gross margin 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	

$$\text{Gross Margin \$} = ?$$

$$\text{Operating Expenses \$} = \$72,000.00$$

$$\text{(Net) Operating Profit} = \$12,000.00$$

$$\text{Gross Margin \$} = \text{Operating Expenses \$} + (\text{Net) Operating Profit \$}$$

$$\text{Gross Margin \$} = \$72,000.00 + \$12,000.00$$

$$\text{Gross Margin \$} = \$84,000.00$$

(Note: There is a relationship between the last three components of the skeletal P & L Statement that is similar to the relationship between the first three components. Even though the remaining two components are not expressed in the retail price formula, the same model is applicable for calculating a missing component when the other two components are known.)

And, as previously discussed in *Part 2: 2-2*, the formulas for calculating gross margin dollars and percent when net sales \$ and cost of goods sold \$ are given may be reviewed below.

$$\text{Gross Margin \$} = \text{Net Sales \$} - \text{Cost of Goods Sold \$}$$

$$\text{Gross Margin \%} = \text{Net Sales \%} - \text{Cost of Goods Sold \%}$$

$$\text{Gross Margin \%} = \text{Gross Margin \$} \div \text{Net Sales \$}$$

Problems: Calculate gross margin dollars and percentage 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	

Profit and Loss Statement Form

Component	Dollars (\$)	Percent (%)
Net Sales	\$200,000.00	100.00%
- Cost of Goods Sold	\$116,000.00	58.00%
= Gross Margin		
- Operating Expenses		
= (Net) Operating Profit		

1. Calculate gross margin dollars.

$$\text{Gross Margin \$} = ?$$

$$\text{Gross Margin \$} = \text{Net Sales \$} - \text{Cost of Goods Sold \$}$$

$$\text{Gross Margin \$} = \$200,000.00 - \$116,000.00$$

$$\text{Gross Margin \$} = \$84,000.00$$

2. Calculate gross margin percent.

$$\text{Gross Margin \%} = ?$$

$$\text{Gross Margin \%} = \text{Gross Margin \$} \div \text{Net Sales \$}$$

$$\text{Gross Margin \%} = \$84,000.00 \div \$200,000.00$$

$$\text{Gross Margin \%} = 42.00 \%$$

OR

$$\text{Gross Margin \%} = \text{Net Sales \%} - \text{Cost of Goods Sold \%}$$

$$\text{Gross Margin \%} = 100.00 \% - 58.00 \%$$

$$\text{Gross Margin \%} = 42.00 \%$$

Profit and Loss Statement Form

Component	Dollars (\$)	Percent (%)
Net Sales	\$200,000.00	100.00%
- Cost of Goods Sold	\$116,000.00	58.00%
= Gross Margin	\$84,000.00	42.00%
- Operating Expenses		
= (Net) Operating Profit		

Maintaining an adequate gross margin to cover operating expenses and operating profit is imperative to a sound retail operation. However, the retailer frequently does not have control over all of the subcomponents of cost of goods sold, or over the net sales volume. The latter is sometimes controlled by the state of the economy and/or consumer spending patterns. Both components significantly impact the amount of gross margin dollars. The amount of gross margin a store realizes varies by the type of the retail store as well as the type and price of merchandise carried by the store.

In *Part 2: 2-5* and *2-6*, respectively, an explanation of operating expenses and (net) operating profit, or the remaining two components of the skeletal P & L Statement, will be explored.