

Calculating Markup: A Merchandising Tool

Part 2: 2-4 Cumulative Markups

Cumulative markup is an average markup at any given period of time (e.g., month, quarter, season, and six month period) during a retail year. It is an aggregate markup on merchandise with varying markups. Buyers purchase goods for the beginning of a new selling season; and, then throughout that season, they purchase goods to be delivered in order to replenish inventory that has sold or marked down. Or throughout the season, they may purchase product that is needed for special promotions or sales.

Cumulative markup includes the beginning inventory (many times given in retail dollars) plus any purchases (usually given at wholesale cost dollars) delivered during a specified period of time. It is calculated for a season-to-date basis or for an inventory that has accumulated over a specified period of time. It is the difference between the total wholesale cost and total retail price of all merchandise handled during a given period of time. Or, it may be defined as the beginning inventory plus receipts or purchases during a specified period of time. It is useful to the retailer for determining if established markup goals are being achieved or for comparison of product classifications, departments, or stores.

In summary, cumulative markup dollars are the total markup dollars on all merchandise for a selected selling period. To calculate cumulative markup dollars and cumulative markup percent, the following formulas are utilized by the retailer:

$$\text{Cumulative Markup \$} = \text{Total Retail \$} - \text{Total Cost \$}$$

$$\text{Cumulative Markup \%} = \text{Cumulative Markup \$} \div \text{Cumulative Retail \$}$$

For calculating **cumulative markup %**, follow the steps listed below. Additionally, the spreadsheet used on page eleven can be modified for calculating cumulative markup percent. (Hint: First, set-up the spreadsheet with retail price components shown in the columns, and the dollars for each type of inventory – beginning or purchases -- in the rows.)

Steps for calculating cumulative markup percentage for the specified period of time:

- Step 1. Calculate the unknown retail value for either opening inventory or purchases.
- Step 2. Calculate **total** retail of opening inventory and purchases.
- Step 3. Calculate the unknown cost value for either opening inventory or purchases.
- Step 4. Calculate **total** cost of opening inventory and purchases.
- Step 5. Calculate **total** markup dollars.
- Step 6. Calculate **cumulative markup percent** for the specified period of time.

Example:

A buyer has an **opening inventory of \$100,000 at retail** with a **markup percent of 52%**. The buyer will be purchasing goods throughout the season for special sales, events, and promotions. She has saved **\$48,000.00 at cost** and plans to establish a **46% markup on the purchases**.

Component	Retail \$ (minus) -	Cost \$ (equals) =	Markup \$
Opening Inventory	\$100,000.00/52% markup	\$48,000.00	

Purchases	\$88,888.89	\$48,000.00/46% markup	
Totals	\$188,888.89 -	\$96,000.00 =	\$92,888.89

(*For this example only, to differentiate **given cost and retail dollars**, numerals in blue are always the **given figures** and those in **black** are always figures that are calculated.)

Step 1. Calculate the unknown retail value.

$$\text{Retail Value \$ (of Purchases)} = \text{Cost \$} \div \text{Cost \%}$$

$$\text{Retail Value \$ (of Purchases)} = \$48,000.00 \div (100\% - 46\%).54$$

$$\text{Retail Value \$ (of Purchases)} = \mathbf{\$88,888.89}$$

Step 2. Calculate **total** retail of opening inventory and purchases.

$$\text{Total Retail \$} = \text{Retail Opening Inventory \$} + \text{Retail Purchases \$}$$

$$\text{Total Retail \$} = \mathbf{\$100,000.00} + \mathbf{88,888.89}$$

$$\text{Total Retail \$} = \mathbf{\$188,888.89}$$

Step 3. Calculate the unknown cost value for opening inventory.

$$\text{Cost Value (of Opening Inventory) \$} = \text{Retail \$} \times \text{Cost \%}$$

$$\text{Cost Value (of Opening Inventory) \$} = \$100,000.00 \times (100\% - 52\%).48\%$$

$$\text{Cost Value (of Opening Inventory) \$} = \mathbf{\$48,000.00}$$

Step 4. Calculate **total** cost of opening inventory and purchases.

$$\text{Total Cost \$} = \text{Cost \$ Opening Inventory} + \text{Cost \$ Purchases}$$

$$\text{Total Cost \$} = \$48,000.00 + \mathbf{\$48,000.00}$$

$$\text{Total Cost \$} = \mathbf{\$96,000.00}$$

Step 5. Calculate **total** markup dollars.

$$\text{Total Markup \$} = \text{Total Retail \$} - \text{Total Cost \$}$$

$$\text{Total Markup \$} = \$188,888.89 - \$96,000.00$$

$$\text{Total Markup \$} = \mathbf{\$92,888.89}$$

Step 6. Calculate **cumulative markup percent**.

$$\text{Cumulative Markup \%} = \text{Total (Cumulative) Markup \$} \div \text{Total (Cumulative) Retail \$}$$

$$\text{Cumulative Markup \%} = \$92,888.89 \div \$188,888.89$$

$$\text{Cumulative Markup \%} = \mathbf{49.18\%}$$

In *Part 2: 2-5* and *Part 2: 2-6*, **initial markup** and **maintained markup** respectively will be explored with explanations and examples in order to contrast and compare the significance of these two types of markups.