For a more comprehensive guide to retail and wholesale planning, download our Retail Primer [ebook](#).

SELL THROUGH (ST%)
Period Sales/(Period Sales + Inventory at End of Period)
Sales = 1000   EOH= 9000
ST%= 1000/(1000+9000)= .10 or 10%
Benchmarks for sell through vary greatly by category and retailer. For example, a 20% weekly sell through on a junior's denim jean may be considered average, where as 5% weekly sell through may be considered very high for a luxury comforter set.

WEEKS OF SUPPLY (WOS)
Inventory/Average Weekly Sales
OH= 9000   Last 5 Weeks of Sales = 4500   AV= 4500/5=900
WOS= 9000/900 = 10 weeks
 Example: 8 WOS is high for Wal-Mart, Anything below 24 at Bed Bath and Beyond is considered lightly covered.

Average Unit Retail (AUR) or Out the Door (OTD)
Sales $ for Period/Sales Units for Period
Sales $ = $10,000   Sales Units = 657
AUR= $15.22

Gross Profit Dollars and Percent (GP$, GP%)
GP$ = Sales $ – Cost of Goods Sold $ (Cost $ = Sales Units x Cost)
GP% = GP$/Sales $
Margins also vary widely between product categories and retailers. For instance, price clubs usually accept margins between 11 – 20%, while department stores expect well over 40%.

Markdown Dollars and Percent (MD$, MD%)
MD$ = Ticketed Price Sales – Actual Sales $
MD%= MD$/Actual Sales $

Does a 25% off Promotion = 25% Markdown?
Ticketed Price: $14.99   Promotion: 25% off
What was the Markdown %?
Out the Door (AUR) = $14.99 x .75 = $11.24
Markdown $= $14.99 - $11.24 = $3.75
Markdown % = $3.75/$11.24 = 33.3%
No. As you can see, when you sell something at 25% off, you're really taking a 33.3% markdown!

Average Weekly Units/Store   *and*   Average Weekly $/Store
Av Weekly Units/Store = Av Unit Sales/# Stores
Last 6 weeks sales = 4500   # Stores = 500
Av Weekly Units= 4500/6 = 750
Av Weekly Units/Store = 750/500 = 1.5
Av Weekly $/Store
Av Weekly $/Store = Av $ Sales/# Stores
Last 6 weeks sales $ = $45,000   # Stores = 500
Av Weekly $ = $45,000/6
Av Weekly $/Store = $7,500/500 = $15

Retail Reference

Name	Description	Formula	Example
Age (Weeks Active)	The amount of weeks an item is on the selling floor. (Weeks Active implies the quantity of weeks an item has been selling, or available for selling, starting from the first week it sells until it is sold out).	n/a	n/a
All Comp Store Sales	A comparison of stores that have been open for more than one year (new stores less than a year old are not included in the comparison).	n/a	n/a
Asset Efficiency Measures	These formulas determine a company's efficiency in generating sales and profit. There can be large volume with no profitability, or little volume with great profitability, et cetera.	Turns = Ann Retail Sls / Avg. Retail Inv Ann Retail Sls = Avg. Retail Inv * Turns Avg. Retail Inv = Ann Sls / Turns Turns = 52 / W.O.H. W.O.H. = 52 / Turns R.O.I.I. = Ann GP$ / Avg. Cost Inv Ann GP$ = Avg. Cost Inv * R.O.I.I. Avg. Cost Inv = Ann GP$ / R.O.I.I. R.O.I.I. = (MM% / CC%) * Turns MM% = (R.O.I.I. / Turns) / (1 + (R.O.I.I. / Turns)) Turns = R.O.I.I. / (MM% / CC%)	
Average Cost (AC), or Avg Cost	An average cost can be determined when the Retail and MU% are known.	AC when Retail and MU% are known: AC = R x (100% - MU%)	AC = $12,500 x (100% - 52%)
Average Lead Time (calendar days)	The number of calendar days between the time the order is placed and received.		
Average Retail (AR)	An average retail can be determined when the Cost and MU% are known.	AR when Cost and MU% are known: AR = Cost / (100% - MU%)	AR = $2,383.75 / (100% - 49%)
Average Retail Stock (ARS)	See Average Stock. The term "Retail" is the total retail dollar amount for which the product is owned (hard marked).	ARS = (BOM + EOM) / 2 or ARS = (BOM + EOM + EOM) / 3	May BOM $10,000 May EOM $9,400 June EOM $8,200 sum is $27,600 / 3 = $9,200
Average Stock (AS) or Average Inventory or Average On-Hand (Avg. OH)	The quantity obtained by adding the beginning inventory to the ending inventory and dividing that sum by the number of its parts. Formula can be applied to units and dollars.	AS = (BOM + EOM) / 2 or AS = (BOM + EOM + EOM) / 3	May BOM 250 units May EOM 759 units June EOM 538

Name	Description	Formula	Example
			sum is 1547 / 3 = 516 units (rounded up)
Average Unit Retail (AUR)	Total dollars (gross or net) for a specified period divided by the total units (gross or net) for the same period (always expressed in dollars).	AUR = Dollars / Units	AUR = $4564.63 / 101 = $45.19
Basic Stock Method	Deduct planned average monthly sales by the planed average inventory (the total planned sales divided by desired turn). The result is the minimum stock needed at the beginning of each month.	Planned Avg. Inventory - Planned Avg. Monthly Sales = Basic Stock	($540,000 / 2) = $270,000 ($90,000) = $180,000
Billed Cost	The vendor's price to the retailer. This is different from Cost of Goods Sold.	n/a	n/a
BOM stock	The inventory at the beginning of the month. This can be expressed in dollars or units.	n/a	n/a
Name	**Description**	**Formula**	**Example**
Chargeback	The quantity charged for incorrectly shipped items or damaged items as defined in written agreement between the vendor and the retailer.	n/a	n/a
Closing InventoryOr Ending Inventory	The amount of inventory remaining at the end of the fiscal year. Can be expressed in units, cost dollars and retail dollars.	n/a	n/a
Closing Physical Stock	A physical count of remaining merchandise, expressed in retail dollars. Most retailers do a physical count twice a year.	n/a	n/a
Complement	A percentage deducted from 100.	Complement = (100% – 65%) = 35%, or (1 - .65) = .35	
Cost	The price the retailer pays for merchandise.	n/a	n/a
Cost of Goods Sold (COGS) and Total COGS	The price of the merchandise. The Total COGS is the total amount the retailer pays for the merchandise plus or minus any additional fees to make the goods sellable.	n/a	n/a
Cost On Hand	The cost value of the merchandise on hand.	n/a	n/a
Cost On Order	The cost value of merchandise on order.		
Cumulative Markup	The markup at the beginning of a period plus the markup for all receipts received during the period.	n/a	n/a
Customer Allowances	A reduction in price that is given to the customer after the purchase.	n/a	n/a
Customer Returns (the retailer's	Merchandise returned to the retailer by the customer in exchange for store credit or cash.	n/a	n/a

Name	Description	Formula	Example
customer)			
Department	A category used to group specific merchandise.	n/a	n/a
Dollar Merchandise Plan	This is a document projecting sales, inventory, markdowns, markups, and receipts for a given period	n/a	n/a
Door	Door implies a physical location made of "bricks and mortar" for a given retailer (e.g., Kohl's will open 40-doors).	n/a	n/a
EOM	End of month	n/a	n/a
GMROI (gross margin return on investment)	Measures capital turnover.	GMROI = Gross Margin $ / Average Inventory at Cost	n/a
Gross Margin (GM) and Gross Margin Percent (GM%)	The difference between Net Sales and Total-COGS is the gross margin. When forecasting, use the difference between the product of the markup percent complement and the markdown percent.	GM = Net sales - Total cost of goods sold GM% = GM / Net Sales GM% = (MU% - ((1-MU%) * MD%)	GM = $18.56 - $10.51 = $8.05 GM% = $8.05 / $18.56 = 0.43372844828 Expressed: 0.43372844828 * 100 = 43.4%
Gross Markdown	The initial price reduction	n/a	n/a
Gross Profit	*See Gross Margin*	n/a	n/a
Gross Sales	The retail value prior to returns and discounts	n/a	n/a
Initial Markup or Initial Margin (IM) and IM%	The difference between the COGS and the original retail price is the initial markup. The initial markup percent is the initial markup divided by the original retail price and then multiplied by 100.	IM = ((Original Retail - Cost) / Original Retail) * 100	n/a
Name	**Description**	**Formula**	**Example**
Inventory	Synonymous with the term "stock." (a.k.a. on hand). This is quantity of goods owned at the end of a specific period of time. This represents potential profit and is used as a gauge when comparing to actual profit.	n/a	n/a
Invoice Match Rate	The percent of invoices that match the orders.	n/a	n/a
LY	Last Year	n/a	n/a
Maintained Markup or Maintained Margin (MM)	The difference between the cost of goods and Net Sales (see below).	MM$ = Net Sales - Cost of Goods Sold MM% = MM$ / Net Sales MM% = MU% -MD%Cost	

and Maintained Markup Percent (MM%)		MD%Cost = MD%Rtl * CC% CC% = 1.00 -MU%	
Margin	See Gross Margin, Initial Markup or Maintained Markup.	n/a	n/a
Markdown MD$, and MD%	The difference between the original retail and the new retail is the markdown price. Divided the markdown by the original retail and then multiply by 100 to get the markdown percent.	MD$ = Original Retail – New Retail MD% = (MD$ / Original Retail) * 100	Original Retail $24.00, New Retail $18.87 MD$ = $24.00 - $18.87 = $5.03 MD% = ($5.03 / $18.87) * 100 = 26.7%
Markup (MU) Markup % (MU%)	See Initial Markup and Initial Markup Percent	n/a	n/a
Net Cost	Net Cost is the final cost of the merchandise after all discounts are applied.	n/a	n/a
Net Loss	A net loss happens when the gross margin is less the operating expenses.	n/a	n/a
Net Markdown	Net Markdown is the difference between the original retail price and net retail price.	n/a	n/a
Net Profit	There is a net profit when the gross margin is greater than the operating expenses.	n/a	n/a
Net Sales	Gross sales minus allowances and customer returns	Net Sales = Gross Sales – Allowances - Returns	
Number of Weeks of Supply	Determines inventory needs	Weeks / Desired Turnover	
LW	Last Week	n/a	n/a
On Hand (OH)	Inventory. Stock. This can be expressed in units or dollars.	OH = LW Stock - TW Net Sales + TW Shipments	n/a
On Order	On Order refers to orders that have not been receipted.	n/a	n/a
Open-to-buy (OTB)	Open-to-buy determines the amount money available to purchase goods for specific period of time in the future.	OTB = Planned Sales + Planned Markdowns + Planned EOM OH - Planned BOM OH	n/a
Opening Book Inventory	The retail or cost value of owned merchandise at the beginning of the fiscal period.	n/a	n/a
Opening Inventory	The retail value of owned merchandise at the beginning of a given period.	n/a	n/a
Operating Expenses	Direct and Indirect expenses associated with running an organization.	n/a	n/a

Name	Description	Formula	Example
Operating Income	Retailers sometimes refer to their net sales as operating income.	n/a	n/a
Out-the-Door (OTD)	Out-the-Door is an item's final retail price.	Ticketed price – discount = OTD	n/a
Order Fill Rate %	Percent of orders receipted vs. ordered	n/a	n/a
Physical Inventory	The retail dollar value of all goods physically present in a periodic stock count.	n/a	n/a
Planned Purchases	See Planned Receipts.	n/a	n/a
Planned Receipts	Merchandise the retailer plans to receive for given period of time.	n/a	n/a
POS	Point-of-sale	n/a	n/a
Profitability Measures	Formulas used to determine a company's health. A healthy company is a profitable company. (e.g. Initial Margin, Cost, Retail, Markdown%, Markdown $, Markdown %, POS Sales, Maintained Margin)	MU% = (Retail -Cost) / Retail Cost = Retail * (1.00 -MU%) Retail = Cost / (1.00 -MU%) MD% = MD$ / POS Sales MD$ = POS Sales * MD% POS = MD$ / MD% MM% = MU% -MD%Cost MD%Cost = MD%Rtl * CC% CC% = 1.00 -MU% MM% = MU% -(MD% * (1.00 -MU%)) MM% = MU% + (MD% * MU%) -MD% MU% = (MM% + MD%) / (1.00 + MD%) MD% = (MM% -MU%) / (MU% -1.00)	
Reductions	Reductions are the sum of all markdowns, employee discounts, customer discounts, and shortages.	n/a	n/a
Retail	The price at which the retailer sell its merchandise.	n/a	n/a
Retail Reductions	The sum of markdowns, stock shortages and employee discounts.	n/a	n/a
ROI	Return on Investment. This is the annual gross profit divided by the average inventory at cost. Increase Maintained Margin, Turns or both to improve ROI.	R.O.I.I. = Ann GP$ / Avg. Cost Inv R.O.I.I. = (MM% / CC%) * Turns	
Sell Thru (ST), and ST%	The amount sold vs. the inventory.	ST = Sales / (Sales + On Hand)	ST = 5 / (5 + 100) = 0.04761904762
		ST% = ST * 100	ST% = 0.04761904762 * 100 = 4.8%
Shortage	The difference between what's recorded and what's physically counted. (e.g. shrinkage can cause a shortage)	n/a	n/a

Shrinkage	Damaged or pilfered merchandise is shrinkage.	n/a	n/a
Sls	Sales	n/a	n/a
Stock-Sales Ratio	BOM Stock divided by Sales for the same month.	Stock to Sales = BOM Stock / Sales for the Month	
Store Weeks on Hand	The average number of weeks the store will last	n/a	n/a
STD	Season-to-Date	n/a	n/a
Total Cost of Goods Sold	See Cost of Goods Sold	n/a	n/a
Transfers	See Merchandise Transfers	n/a	n/a
Turnover, or Turn	Net Sales divided by Average Inventory. This can be expressed in both dollars and units.	n/a	n/a
TW	This Week	n/a	n/a
Name	**Description**	**Formula**	**Example**
U	Unit or Units	n/a	n/a
Volume Measures	Formulas used to determine a company's size and growth rate. (e.g. Sales Increase %, LY Sales, TY Sales, Average Price, POS Sales, POS Qty)	Sls Inc% = (TY Sls -LY Sls) / LY Sls LY Sls = TY Sls / (Sls Inc % + 1.00) TY Sls = LY Sls * (Sls Inc % + 1.00) Avg. Px = POS Sales / POS Qty Sls = POS Qty * Avg. Px Qty = POS Sales / Avg. Px n/a	
Weeks On Hand (W.O.H.)	This determines how many weeks of inventory that remain based on current selling trends.	W.O.H. = current inventory / avg. sls (for desired period)	
WTD	Week-to-Date	n/a	n/a
YTD	Year-to-Date	n/a	n/a