

Formulas, Ratio Definitions and Sample Calculations

Performance Measures	Method of Computation	Expressed As	Computational Example
Profitability Ratios			
Gross Profit Margin	Gross Profit ÷ Sales	Percent	\$500,990 ÷ \$1,279,015 = 39.1%
Net Profit Margin	Net Profit (After Tax) ÷ Sales	Percent	\$10,993 ÷ \$1,279,015 = .9%
Maintained Margin	Maintained Margin (after Markdowns & Shrink) ÷ Sales	Percent	\$450,000 ÷ \$1,279,015 = 35.2
Return on Assets			
– Before Tax & Interest	Net Profit (EBIT) ÷ Total Assets	Percent	\$17,395 ÷ \$523,037 = 3.3%
– After Tax & Interest	Net Profit (After Tax) ÷ Total Assets	Percent	\$10,993 ÷ \$523,037 = 2.1%
Return on Net Assets (RONA)	Net Profit (After Tax) ÷ Net Assets	Percent	\$10,993 ÷ \$176,168 = 6.2%
Space Productivity			
Sales per Store	Sales ÷ Number of Stores	Currency	\$1,279,015 ÷ 2 = \$639,508
Sales per Square Feet of:			
– Selling Area	Sales ÷ Selling Space (excludes stock rooms, dressing rooms without mirrors, receiving areas, behind cash wrap etc.)	Currency	\$1,279,015 ÷ 10,000 = \$127.90
– Total Area	Sales ÷ Total Store Space	Currency	\$1,279,015 ÷ 17,500 = \$73.09
Gross Margin per Square Foot of:			
– Selling Area	Gross Margin ÷ Selling Space	Currency	\$566,118 ÷ \$10,000 = \$56.61
– Total Area	Gross Margin ÷ Total Store Space	Currency	\$566,118 ÷ \$17,500 = \$32.35
Selling to Total Store Space	Selling Space ÷ Total Store Space	Percent	10,000 ÷ 17,500 = 57.1%
Average Store Size	Total Store Space ÷ Number of Stores	Square Feet	17,593 ÷ 2 = 8,750 sq. ft.
Transactions per Sq. Ft. of:			
– Selling Area	Total Sales Transactions ÷ Selling Space	Ratio	25,140 ÷ 10,000 = 2.51
– Total Area	Total Sales Transactions ÷ Total Store Space	Ratio	25,140 ÷ 17,500 = 1.44

Formulas, Ratio Definitions and Sample Calculations (cont'd)

Performance Measures	Method of Computation	Expressed As	Computational Example
Inventory Productivity			
Inventory Turnover	Sales ÷ Average Inventory @ Retail value	Times	$(\$702,392 \div \$10,505) \div \$168,673 = 4.2x$
Margin on Inventory Percentage	Gross profit on Inventory ÷ Value at Retail	Percent	$\$996,111 - \$2,100,003 = 47.4\%$
Sales to Inventory	Sales ÷ Average Inventory @ Retail	Times	$\$1,279,015 \div \$168,673 = 7.6x$
Gross Margin Return on Inventory Investment (GMROI)	Gross Profit Dollars ÷ Average Inventory @ Cost	Currency	$\$566,118 \div \$168,673 = \$3.36$
Sell Out Rate	Sales ÷ Inventory @ retail	Percent	$\$35,800 \div \$248,000 = 14.4\%$
Open to Buy in Currency	Planned Ending Stock @ Retail Value for the Month + Sales for the Month + Inventory Reductions for the Month – Planned Opening Stock @ Retail Value for the Month	Currency	$\$250,000 + \$52,000 + \$2,500 - 225,000 = \$79,500$
Open to Buy in Units	Planned ending stock in units for the month + unit sales for the month – planned opening stock in units for the month	Units	$4,000 + 1,000 - 3,500 = 1,500$
Personnel Productivity			
Sales per Employee	Sales ÷ Total Number of (Full-time Equivalent) Employees	Currency	$\$1,279,015 \div 19.5 = \$65,591$
Sales per Selling Employee	Sales ÷ Full-time Equivalent Selling Employees	Currency	$\$1,279,015 \div 7.5 = \$170,535$
Gross Margin per Employee	Gross Margin ÷ Total Number of (Full-time Equivalent) Employees	Currency	$\$566,118 \div 19.5 = \$29,032$
Associate to Customer Ratio	Total Customers in Store ÷ Total Sales Associates in Store	Ratio	$18 \div 3 = 6$
The “Big Three”			
Average Transaction	Sales ÷ Number of Transactions	Currency	$\$25,500 \div 1200 = \21.25
Items per Ticket	Number of Items Sold ÷ Number of Transactions	Number	$3,800 \div 1200 = 3.16$
Conversion Rate	Total Transactions ÷ Total Traffic	Percent	$1200 \div 3600 = 33.3\%$