

Retail KPI Cheat Sheet

21 formulas, every one worked from the same store's figures. What each one divides by is the part that matters.

RETAIL OPERATIONS TOOLKIT

SMARTER DECISIONS. BETTER RETAIL.

retailopstoolkit.com/resources/retail-kpi-cheat-sheet

SALES AND MARGIN	
Gross margin \$	\$626,240
Net Sales - COGS	
Gross margin %	38.0%
Gross Margin \$ ÷ Net Sales (by SALES)	
Markup % on cost	61.3%
Gross Margin \$ ÷ COGS (by COST)	
Markdown rate %	6.25%
Markdowns ÷ Net Sales	
Average transaction value	\$40.00
Net Sales ÷ Transactions	
Units per transaction	1.80
Units Sold ÷ Transactions	
Conversion rate %	20.0%
Transactions ÷ Traffic	
Sales per square foot	\$257.50
Net Sales ÷ Selling Area	
Sales per employee	\$103,000
Net Sales ÷ Average FTE	
COST AND LOSS	
Cost complement %	62.0%
COGS ÷ Net Sales	
Shrink rate %	1.5%
Shrink at Retail ÷ Net Sales	
Labor cost %	13.0%
Payroll ÷ Net Sales	

The three denominator traps

Each one produces a plausible number that is wrong. None of them raises an error anywhere.

1. Margin against sales, reported as markup

\$626,240 against sales of \$1,648,000 is 38.0%. The same spread against cost of \$1,021,760 is 61.3%. Buying at 38% markup to protect a 38% margin lands at 27.5%, which is 10.5 margin points short on every unit. Convert before the buy, not after.

INVENTORY	
Inventory turnover	4.01
COGS ÷ Avg Inventory at Cost	
Days inventory outstanding	91 days
Days in Period ÷ Turnover	
GMROI	\$2.46
Gross Margin \$ ÷ Avg Inventory at Cost	
Sell-through rate %	84.3%
Units Sold ÷ Units Available	
Avg inventory at retail	\$411,290
Avg Inv at Cost ÷ (1 - Margin %)	
Stock-to-sales, monthly	3.0
Avg Inv at Retail ÷ Monthly Sales	
Weeks of supply	13.0 wks
Avg Inv at Retail ÷ Weekly Sales	
SUPPLY	
OTIF %	89.0%
Orders On Time AND In Full ÷ Orders	
Fill rate %	95.5%
Lines Shipped Complete ÷ Lines Requested	

Reading GMROI

$GMROI = [\text{Margin \%} \div (1 - \text{Margin \%})] \times \text{Turnover}$
Here $0.6129 \times 4.01 = \$2.46$, exactly.

Below \$1.00 the inventory returned less gross margin than the average capital tied up in it. That is definitional, not a benchmark. Above it, adequacy depends on your carrying cost, cost of capital and markdown exposure. No authoritative public dataset of retail GMROI by category exists, so this sheet prints no ranges. Compare against your own prior period.

2. Ending inventory in place of average

Ending \$242,000 rather than average \$255,000 reads turnover as 4.22 not 4.01, and GMROI as \$2.59 not \$2.46. Both overstate by 5.4%. It flatters hardest in periods that closed with a drawdown, usually the bad ones.

The store every figure comes from

Northgate Home, one store, one fiscal year. An illustrative dataset, not a real retailer, chosen so every metric ties out.

Net sales \$1,648,000	COGS \$1,021,760
Beginning inv \$268,000	Ending inv \$242,000
Selling area 6,400 sq ft	Transactions 41,200
Units sold 74,160	Units available 88,000
Traffic 206,000	Average FTE 16.0
Markdowns \$103,000	Payroll \$214,240
Shrink \$24,720	Days in period 365

What the inputs mean

Net sales

After returns, discounts and allowances. Excludes sales tax.

COGS

Landed cost of units sold, not of units bought.

Average inventory

(Beginning + Ending) ÷ 2, at cost. Thirteen-point is better for a part year.

Selling area

Selling floor only. Stockroom, offices and back of house excluded.

Transactions

Completed sales, not line items.

Traffic

Door entries, not web sessions.

Average FTE

Full-time equivalents, not headcount.

3. A cost-basis turn compared to a retail-basis turn

Both read 4.01 here only because one uniform cost complement converted one side to the other. The agreement is arithmetic, not validation. They separate as soon as realized margin differs from the assumed complement. Write the basis on the report.