

Hands – On Calculations

We have provided sample data for you to use during the “hands-on” portion of the seminar. The data used here and in other examples is consistent with definitions and examples used in the additional Business Solutions Seminar series handouts you will receive. In addition, this worksheet example can be taken back to the store as a reference tool.

We have included three different formulas to calculate your GMROII, depending on the data you have available. We use only example #1 in the seminar.

Data Used in the Examples	Your Data for Use in the Examples
\$400,000 [Sales] Annual Sales (Retail Value)	_____ [Sales] Annual Sales (Retail Value)
\$240,000 [Cost of Goods Sold] Annual Costs of Sales	_____ [Cost of Goods Sold] Annual Costs of Sales
\$160,000 [Gross Margin \$]	_____ [Gross Margin \$] Calculated (Sales - COGS)
\$120,000 [Average Inventory] (Cost Value)	_____ [Average Inventory] (Cost Value)
40% Annual Gross Margin %	_____ Annual Gross Margin %
2.0 Annual Inventory Turn	_____ Annual Inventory Turn

Example #1 [Using Sales, Cost of Sales and Average Annual Inventory]

$$\text{GMROII} = \frac{\text{Sales} - (\text{Cost of Goods Sold})}{\text{Average Inventory (Cost)}}$$

$$\text{GMROII} = \frac{\$400,000 - \$240,000}{\$120,000} = \frac{\$160,000}{\$120,000} = 133\% \text{ GMROII}$$

$$\text{GMROII} = \frac{(\text{_____}) - (\text{_____})}{(\text{_____})} = \frac{(\text{_____})}{(\text{_____})} = \text{GMROII}$$

Example #2 [Using Gross Margin (\$), Cost of Sales and Inventory Turns]

$$\text{GMROII} = \frac{\text{Gross Margin \$'s}}{\text{Cost of Goods Sold}} \times \text{Inventory Turn}$$

$$\text{GMROII} = \frac{\$160,000}{\$240,000} \times 2.0 \text{ turns}$$

$$\text{GMROII} = 0.6666 \times 2 = 133\% \text{ GMROII}$$

$$\text{GMROII} = \frac{(\text{_____})}{(\text{_____})} = (\text{_____}) \text{ turns} = \text{GMROII}$$

Example #3 [Using Discount (Gross Margin %) and Inventory Turns]

$$\text{GMROI} = \frac{\text{Discount (Gross Margin \%)}}{[1 - \text{Discount (Gross Margin \%)}]}$$

$$\text{GMROI} = \frac{40\%}{[1 - 40\%]} \times 2.0 \text{ turns}$$

$$\text{GMROI} = \frac{0.40}{[1.0 - .40] = .60} \times 2.0 \text{ turns}$$

$$\text{GMROI} = 0.6666 \times 2 = 133\% \text{ GMROI}$$

$$\text{GMROI} = \frac{(\quad)}{(\quad)} = (\quad) \text{ turns} = \text{GMROI}$$

Return on Inventory Investment - Turns & Discount

Discount /Turns	38%	39%	40%	41%	42%	43%	44%	45%	46%	47%	48%
1.0	61%	64%	67%	69%	72%	75%	79%	82%	85%	89%	92%
1.5	92%	96%	100%	104%	109%	113%	118%	123%	128%	133%	138%
2.0	123%	128%	133%	139%	145%	151%	157%	164%	170%	177%	185%
2.5	153%	160%	167%	174%	181%	189%	196%	205%	213%	222%	231%
3.0	184%	192%	200%	208%	217%	226%	236%	245%	256%	266%	277%
3.5	215%	224%	233%	243%	253%	264%	275%	286%	298%	310%	323%
4.0	245%	256%	267%	278%	290%	302%	314%	327%	341%	355%	369%
4.5	276%	288%	300%	313%	326%	339%	354%	368%	383%	399%	415%
5.0	306%	320%	333%	347%	362%	377%	393%	409%	426%	443%	462%
5.5	337%	352%	367%	382%	398%	415%	432%	450%	469%	488%	508%
6.0	368%	384%	400%	417%	434%	453%	471%	491%	511%	532%	554%
6.5	398%	416%	433%	452%	471%	490%	511%	532%	554%	576%	600%
7.0	429%	448%	467%	486%	507%	528%	550%	573%	596%	621%	646%
7.5	460%	480%	500%	521%	543%	566%	589%	614%	639%	665%	692%
8.0	490%	511%	533%	556%	579%	604%	629%	655%	681%	709%	738%

The table above will serve as a quick reference for you to visually compare the relationship between purchase discount and inventory turn (speed of sale). In the example above, we have highlighted the GMROI for product purchased at 40% discount and achieving 3.5 inventory turns. We compare it to product purchased at a 48% discount achieving 2.5 inventory turns. In this case, achieving one more inventory turn is worth 8 percentage points in discount.