

Review Markup

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Definition of markup

“What is the markup on this shirt?”

Means

What is the ratio of the dollar markup on the selling price on this shirt?

Dollar Markup on Selling Price is normally called the Markup

- By definition the Dollar Markup = Price - Variable Cost
Dollar Markup = $P - V$
- By definition the ratio of the dollar markup on selling price, M_p , is
Markup = (Dollar markup) ÷ (Selling Price)
- $M_p = (P - V) / P$
where P = price, V = variable cost per unit

Set a price based on desired markup and known cost

A retailer normally earns a gross margin of 40%. The retailer buys a toy for \$60 and wants to sell it for a price that earns him the normal markup of 40% on his selling price. What is the price must he sell the toy for?

Set a price based on desired markup and known cost

A retailer normally earns a gross margin of 40%. The retailer buys a toy for \$60 and wants to sell it for a price that earns him the normal markup of 40% on his selling price.

What is the price must he sell the toy for?

Selling Price = \$100
Variable Cost = \$60
Gross Profit = \$40
Markup = $\$40 / \$100 = 40\%$

Set a price based on desired markup and known cost

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$$P = V / (1 - M_p)$$

Some students simply memorize the formula

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$$P = V/(1-M_p) = \$60/(1-0.4) = \$60/0.6 = \$100$$

Learning markup

- Some students spend a few hours before the exam trying to memorize all the equations
- Some spend hours and hours doing homework problems until the formula is internalized
- Some simply remember the definition of markup and derive various equations as needed

Markup on Price

- Find a price, P, given the cost, V, and the desired markup, M_p .
If you know the definition of (dollar) Markup (on selling price)
- $(P - V)/P = M_p$
- where P= price, M_p = markup, V = variable cost per unit

$$P = V / (1 - M_p)$$

Markup on Price

- Find a price, P, given the cost, V, and the desired markup, M_p .
If you know the definition of (dollar) Markup (on selling price)
- $(P - V)/P = M_p$
- where P= price, M_p = markup, V = variable cost per unit
- $P - V = M_p(P)$
- $P = M_p(P) + V$
- $P - M_p(P) = V$
- $P(1 - M_p) = V$
- $P = V / (1 - M_p)$

Markup on Price

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If you don't like algebra,
calculus, statistics, and accounting
Then a marketing major
is not for you!

Markup on Price

- Find a price, P, given the cost, V, and the desired markup, M_p . $V = \$60, M_p = 40\%$
You know the definition of Markup on Price
- $(P - V)/P = M_p$ $(P - \$60) / P = 0.4$
- where P= price, M_p = markup, V = variable cost per unit
- $P - V = M_p(P)$ $P - \$60 = 0.4P$
- $P = M_p(P) + V$ $P = 0.4P + \$60$
- $P - M_p(P) = V$ $P - 0.4P = \$60$
- $P(1 - M_p) = V$ $P(1 - 0.4) = \$60$
- $P = V / (1 - M_p)$ $P = \$60 / (1 - 0.4) = \$60 / 0.6 = \$100$

Markup on Cost

Almost never used in marketing

Definition of markup on cost

- “What is the markup on cost on this shirt?”
- Means
- What is the ratio of the dollar markup on the cost of this shirt?

Markup on Cost, Mv

- Dollar markup = (Selling price)-(Cost)
- Dollar markup on cost = (Dollar markup)÷Cost
- Markup on Cost = $(P-V) / V$
Mv = $(P-V)/V$

Set a price based on desired markup on cost

A retailer normally earns a gross margin of 40%. The retailer buys a toy for \$60 and wants to sell it for a price that earns him a markup on cost of 66.67% on his cost of the toy.

What is the price must he sell the toy for?

Selling Price = \$100

Variable Cost = \$60

Gross Profit = \$40

Markup on Cost = $\$40/\$60 = 66.67\%$

Set a price based on desired markup on cost, Mv

A retailer normally earns a gross margin of 40%. The retailer buys a toy for \$60 and wants to sell it for a price that earns him a markup on cost of 66.67% on his cost of the toy.

What is the price must he sell the toy for?

Selling price = $(1 + Mv) \times V$

Selling Price = $(1 + (P-V)/V) \times V$

Selling Price = $(1 + 0.6667) \times \$60$

Selling Price = \$100

Converting Markup on Cost to Markup on Price

- Always remember a 25% markup on cost is equal to a 20% markup on price

Formal Equation is

- **$1/Mp - 1/Mc = 1$**
- Check
- $1/20\% - 1/25\% = 1$
- $1/0.2 - 1/0.25 = 1$
- $5 - 4 = 1$

Old Accountant's Rule

- Convert 25% markup on cost into a markup on price
- 1) make the ratio
- 25/100
- 2) add the top part to the bottom part
- $25 / (100 + 25) = 25/125$
- 3) Solve
- $25/125 = 1/5 = 20\%$

Solving Markups in The Channel of Distribution

Setting a Suggested List price

- You are a manufacturer of a new garden drill. It costs you \$12 to make it. You want a retail price of \$50.
- You want to sell it through retailers who expect a 50% markup on the suggested list price. They buy it from your wholesalers who expect a 20% markup. What price must you charge the wholesaler?
- **Retailer's Selling price = \$50**
Retailer's gross profit 50% of \$50 = \$25
- Wholesaler selling price = \$25
Wholesaler's gross profit = 20% of \$25 = \$5
- **Wholesaler's cost = \$25 - \$5 = \$20**
Your Selling Price = \$20