

Mathematics for Management

Chapter 9b: Markdown

by

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Content:

□ 9.2 Markdown



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Expected Outcome:

Upon the completion of this course, students will have the ability to:

- 1) Find the markdown, reduced price, original selling price, rate of markdown, or rate of reduced price



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Markdown

What is markdown?

- The reduction in price of a product or service based on the percentage of the original price
- Markdown is the difference in the old price and the new price

Why markdown?

- To face stiff competition
- To encourage purchases in bulk
- To dispose of old, damaged or obsolete stock
- To close a line of merchandise



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Formula Markdown

Markdown = Old retail price – New retail price

$$MD = OP - NP$$

Markdown percent:

$$\begin{aligned}\% MD &= \frac{MD}{OP} \times 100\% \\ &= \frac{OP - NP}{OP} \times 100\%\end{aligned}$$



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Example:

The markdown percent on a TV set is 10%. If the new retail price is RM900, find the old retail price



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Solution:

$$\%MD = \frac{MD}{OP} \times 100\%$$

$$10\% = \frac{OP - NP}{OP} \times 100\%$$

$$\frac{10\%}{100\%} = \frac{OP - 900}{OP}$$

$$0.1 = \frac{OP - 900}{OP}$$

$$0.1 OP = OP - 900$$

$$1 OP - 0.1 OP = 900$$

$$0.9 OP = 900$$

$$OP = \text{RM}1000$$



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Exercises:

- An item that regularly sells for RM425 is markdown to RM318.75. What is the discount rate?
- After having been reduced 75% in price, a sweater is on sale for RM15, what was the regular price?
- A retailer wants to sell an item that cost RM200 at a marked price less 15% discount that will give him a 28% markup based on cost. Find
 - (a) the selling price
 - (b) the list price



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THE END

~THANK YOU~



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