Mathematics for Management

Chapter 9a: Mark-up

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Content:

❑9.0 Introduction

❑9.1 Mark-up

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Expected Outcome:

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

1) Find the mark-up, cost, selling price, rate of mark-up when the mark-up is based on cost or selling price

2) Compare mark-up based on cost with mark-up based on selling price

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Mark-up

What is mark-up?

- The amount of money added to the cost price of a product or service.

- In other words, mark-up is the difference in retail price and cost price

Mark-up = Gross margin = Gross profit

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Formula Mark-up

Selling price/ retail price = Cost price + Mark-up

R   =   C   +   M

Mark-up percent can be based on:

Retail price: $\%M_r = \dfrac{M}{R} \times 100\%$

Cost price: $\%M_c = \dfrac{M}{C} \times 100\%$

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Example:

The price of an antique table is RM5000. What is the retail price and mark-up if the seller wish to have a 20% mark-up based on

(i)   Cost price

(ii)   Retail price

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Solution:

(i) cost price

R	=	C	+	M
?	=	RM5000	+	?
120%	=	**100%**	+	20%

Retail price:

$$\frac{R}{120\%} = \frac{RM5000}{100\%}$$

$$R = \frac{RM5000}{100\%} \times 120\%$$
$$= RM6000$$

Markup:

$$R = C + M$$
$$M = R - C$$
$$= RM6000 - RM5000$$
$$= RM1000$$

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(ii) retail price

R	=	C	+	M
?	=	RM5000	+	?
100%	=	80%	+	20%

Retail price:

Markup:

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Exercises:

- The markup percent based on cost price of a fridge is 20%. What is its markup percentage based on retail price for the fridge?

- A camera costing a shop owner RM270 is sold by him for RM430. Find the markup rate based on cost and retail price.

- A retailer purchased 300 kg of tomato at 60 cents per kilogram. 2% spoilage is expected. If he plans to make a 30% markup based on selling price, find the selling price of the tomato per kg?
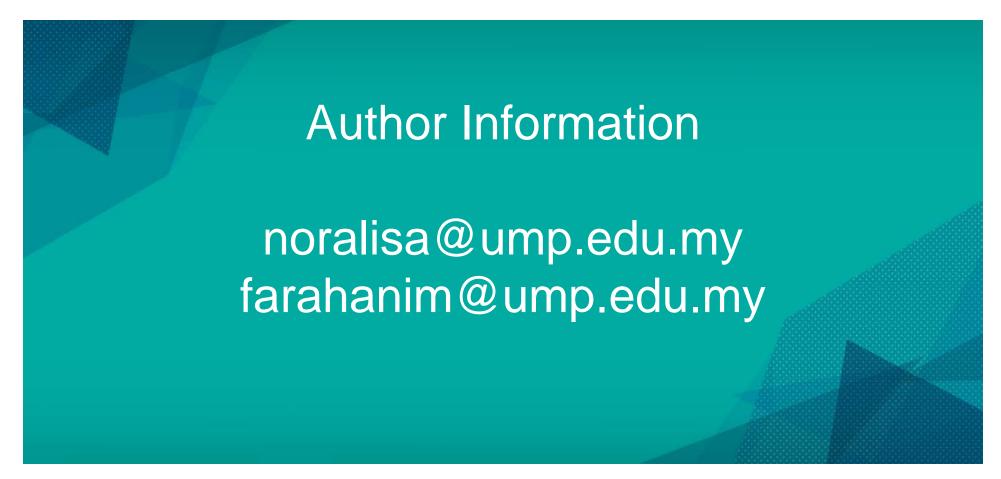
THE END

~THANK YOU~

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