

Monyetla Bursary Project

Grade 11

Lesson 1: Finance

1. Cost price and selling price; Profit and loss; Break-even analysis

- Cost price = selling price – profit
- Selling price = cost price + profit
- Profit = selling price – cost price (positive answer)
- Loss = selling price – cost price (negative answer)

Determining cost price:

- Cost price is the amount of money it takes to produce a specific item, without making a profit.
- Cost price includes two elements:
 1. **Fixed cost:** include all those expenses that are directly involved in production and do not vary with the level of output.
 2. **Variable cost:** costs which vary in proportion to the volume of production.

Determining selling price:

- Cost price plus applicable mark-up (percentage profit), e.g. 25%
 - $100\% + 25\% = 125\%$

	%	Amount given
SP	100% + %profit Or 100% - %loss	
CP	100%	
Profit (+) Or Loss (-)	% profit Or % loss	

To calculate any of the missing values:

$$\text{Amount given} \times \frac{\% \text{ you want}}{\% \text{ you want}}$$

Break-even analysis:

Break-even analysis:

A graphical technique used to determine at which point a business makes a profit

Break-even point:

The point on the graph at which no profit and no loss is made. Income is equal to expenses at this point.

Made up of two values, e.g. the number of items that should be sold and the amount of money that should be made from the sale of those items (the x-variable and the y-variable)

Identification:

The point of intersection on the graph.

Constructing formulae for income and expenses:

- Expenses = fixed expense + variable expense
- Income = selling price x number of items sold

2. Tariff systems:

Water is charged according to a sliding scale or step tariff system. It does not work according to an average rate, unless specifically stated.

The kilolitres need to be divided into their specific tariff block and then you add the totals for each block to get the total payable.

Always look out for a note that indicates whether the table given is inclusive or exclusive of VAT. If it is exclusive of VAT, you need to add 15% VAT to the total of the blocks.

3. VAT:

- **VAT = 15%**
- **VAT-exclusive = 100%**
- **VAT-inclusive = 115%**

	%	Amount given
Incl.	115%	
Excl.	100%	
VAT	15%	

To calculate any of the missing values:

$$\text{Amount given} \times \frac{\% \text{ you want}}{\% \text{ you want}}$$