

Access Award in Business Skills

Lesson 3 – Using Numbers in Business

Rounding Numbers

- In your assessment, you will be required to round numbers
- This could be:
- To the nearest whole number (e.g. £350)
- To one decimal place (e.g. £4.5 million)
- To two decimal places (e.g. £6.25)
- Note: VAT figures must be rounded down to the nearest penny

Basic Numerical Calculations

- **Addition**
- **Subtraction**
- **Multiplication**
- **Division**

Calculating Profits and Losses

- In your assessment it is likely that you will have to use your addition and subtraction skills along with your accounting knowledge to calculate profits and losses
- Cash Sales – where money is received at the same time that the sale is made e.g. buying goods in a shop
- Credit Sales – where money is received after the sale is made e.g. a business might sell goods on 30 day credit terms which means it gets paid 30 days after the date of sale

Calculating Profits and Losses

- **Cost of Sales** – the cost of producing the goods that are sold or the cost of buying in the goods that are sold
- **Gross Profit** – the amount of money left after deducting the cost of sales (sales minus cost of sales equals gross profit)
- **Expenses** – all other costs of the business e.g. motor expenses, accountancy fees and rent paid
- **Net Profit or Net Loss** – the amount of money left after deducting all costs (gross profit minus expenses equals net profit or net loss)

Fractions

- Fractions are a way of showing a part of the whole number
- The top half of the fraction is called the numerator (the 'part')
- The bottom half of the fraction is called the denominator (the 'whole')
- For instance, if you buy a pizza with a friend and have half each, your half would be written as $\frac{1}{2}$ and shows that you have had one of the two halves
- Fractions should be written in their lowest possible terms

Ratios

- Ratios give the same information as fractions, but show it in a different way – they show one thing compared to another
- For instance, in a school 35 students take GCSE Art and 20 students take GCSE Music – what is this expressed as a ratio?
- The ratio can be initially shown as 35 : 20 (thirty-five to twenty)
- Ratios should be shown in their lowest common form
- The ratio above would therefore become 7 : 4 (seven to four)

Calculating Averages

- **Range** – the range is the difference between the highest and lowest items of data in a set of data
- **Mode** – the mode is the item of data that appears the most frequently in a set of data
- **Mean** – the arithmetical average of all of the items of data in a set of data. This is calculated by adding together all of the data values and dividing the total by the number of items of data you have added together

Estimation and Rounding

- It can be sometimes be difficult to perform calculations without the use of a calculator
- To make things easier, we can use estimates and rounding
- For instance, if we had to calculate the cost of supplying 893 items at £10.14 each, we could estimate the cost by working out 900 items at £10 each, which comes to £9,000
- The actual cost of supplying these items is £9,055.02 which makes it very likely that our detailed calculation is correct