

# USING MATHS IN BUSINESS



**Let's do it**  
**CREATIVELY**

4/17/2010

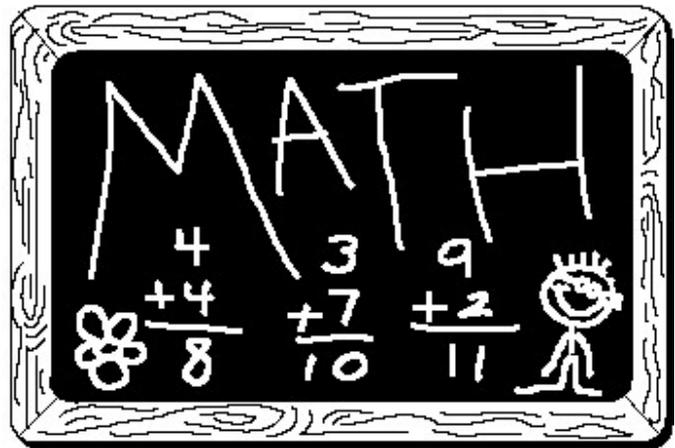
Using Maths in Business

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# Using Maths in Business

Many students are unaware of how often basic mathematics is used in our everyday life. Many high-profile jobs such as business consultants, computer consultants, airline pilots, company directors and managers, engineers and a number of others require a good understanding of mathematics.

It also plays an important role in business to record and manage business operations and can provide powerful support for business decisions. Mathematics usually used in commerce includes elementary arithmetic, such as fractions, decimals and percentages, elementary algebra, statistics and probability. Companies mainly use mathematics in accounting, inventory management, marketing, sales forecasting and financial analysis.



## Starting a Business

When starting a business, in order to provide financial support banks request a business plan. Depending on the business plan, financial support is granted or otherwise. Business plans contains budgets and forecasts, all of which need to be expressed in mathematical terms.

## Accounting

All transactions within a business have to be recorded in the company accounts and very often require large sums of money. In order to work out the expected performance for the following year,

one would need to be able to estimate the effect of changing numbers in the accounts. This will enable the accountant to measure how well the business is and will be expected to be doing. Besides, in many countries, all registered companies by law have to file accounts with a specialised department or authority once a year.

### Sales

Businesses also rely heavily on using percentages. A sales person for example, needs to be quick at mental arithmetic, approximation and in working out percentages. The more percentage discount given to customers when selling them a product or service, the less profit the company will make so it really does pay for a sales person to know his or her math!

A sales assistant in a retail store needs to be able to calculate the cost of goods and change the customers require without using the cash register. Business owners would want to make sure that their sales assistants can still deliver an excellent customer service if the machines break down.

A sales manager on the other hand, uses maths to calculate and forecast the company sales figures. This will enable to demonstrate the level of improvements in sales. It is also important to understand where sales come from and the average spending per customer. This will enable the sales manager to understand which type of customer or customers are interested in their product or service and would enable them to better cater for their needs.

### Purchasing

The role of the sales manager in many cases is also related to how much stock to order and when. Business information on sales will be passed on the purchasing department and orders are done based on these figures. This will avoid having stock pile ups in low seasons and shortages in high seasons.

### Human Resources

A human resources manager, amongst other duties, would need to work out the wages of the people employed in the company. Maths is used to calculate the number of hours worked by each employee and how much they get paid per hour, how much overtime a person is due, employees' national insurance contributions and other benefits or deductions.

### Concluding Remarks

Knowing how to subtract, divide, get percentages and average is essential regardless of whether or not this is a prerequisite of your job! Imagine you invest your hard earned money in the bank or get a loan – how would you know that you are doing a great deal? You need mathematics to calculate compound interest rates and see how much your savings can grow. You also need to use math to understand monthly percentages, which are added to your bank loan or you could end up paying €15,000 in 10 years time for borrowing €5,000 today! This is a good reason to understand mathematics.