

# E-workbook: Business Mathematics Edition 2

Introduces the fundamental mathematical tools that are used in finance and builds a working knowledge of basic business calculations by providing unlimited practice of real world applications. Complexity of the mathematical formulas is minimised by the use of financial tables. This e-workbook is suitable for students with no previous experience of financial transactions or the mathematics that underlie them.

## Fundamental concepts

- Concepts of risk and return
- The time value of money
- Positioning of cash flows on a timeline

## Simple interest

- Calculating the amount of simple interest
- Calculating the number of days between dates
- Future value at simple interest
- Present value at simple interest
- Finding the interest rate and time period
- Promissory notes at simple interest

## Compound interest

- Nominal, effective and equivalent rates
- Future value at compound interest
- Present value at compound interest
- Finding the interest rate and time period
- Equations of value

## Annuities

- Future value of an ordinary annuity
- Present value of an ordinary annuity
- Present value of a deferred annuity
- Present value of a perpetuity
- Finding the periodic payment

## Applications to personal finance

- Finding the periodic payment for a housing loan
- Calculating a loan repayment schedule
- Applications of business mathematics to bank accounts and credit cards

## Applications to corporate finance

- Pricing a bond on a coupon date
- Making investment decisions based upon net present value
- Share valuation