

## Objectives 2 — Basic Algebra

After covering this section, you should be able to:

- evaluate algebraic expressions
- expand expressions using the laws of algebra
- rearrange a formula to make another of the variables the subject
- obtain the solution of a linear equation in one unknown
- state the criterion that determines the number of roots of a quadratic equation
- use the formula to solve a quadratic equation
- complete the square of a quadratic expression, and hence solve the related quadratic equation
- factorise a quadratic expression, and hence solve the related quadratic equation
- state the formulae for the sum and the product of the roots of a quadratic equation
- solve cubic equations with simple roots

The material in this section is largely contained in Chapters 2 and 4 of MB; more precisely, we cover material from sections 2.1, 2.2, 2.4, 4.2 and 4.4, from the book.

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