

Further Pure Mathematics 1

Complex Numbers

Section 4: Complex numbers and equations

Crucial points

1. **Remember that complex roots of polynomial equations with real coefficients always occur in conjugate pairs**

This means that if you know one complex root, then you know another one.

Note: this does not apply if the coefficients of the equation are not real!

2. **Make sure that you can divide a polynomial by a linear or quadratic factor**

If you find this difficult, there are two PowerPoint presentations in this section which demonstrate factorisation of polynomials by inspection or algebraic long division.

3. **Check your work carefully**

It is easy to make mistakes in the algebra when solving polynomial equations.