

EdExcel Further Pure 1

Complex Numbers

Section 1: Introduction to complex numbers

Crucial points

- 1. Simplify where possible**
Remember that when you are working with complex numbers, you should always simplify i^2 to -1 .
- 2. Make sure that you know what a complex conjugate is**
Remember that for a complex number $z = x + iy$, the complex conjugate $z^* = x - iy$.
- 3. Remember that the product of a complex number and its conjugate is real**
In particular, when dividing complex numbers you need to use the fact that zz^* is always real.
- 4. Remember that complex roots of quadratic equations occur in conjugate pairs**