

Written assignment 1

Write in LaTeX a document of about 5 pages (more allowed) that describes the following topics:

1. Definition of the complex numbers, basic algebraic properties including standard operations like the conjugate and the modulus.
2. Description of the method for solving quadratic equations in the complex numbers.
3. Polar representation of complex numbers and its use in finding n -th roots.
4. Limits of sequences of complex numbers, main results.
5. Series of complex numbers, definitions and main results.

You should include at least the statements of definitions and theorems. You should at least sketch proofs for selected theorems. You have a certain leeway as to how you structure the document.

You can use OverLeaf¹ for your code, or if you prefer to install software on your personal computer let me know.

You should email me both the pdf version, which you can get by clicking at the PDF option in overleaf, and the tex version, which you can get by clicking on “project” and then choosing the “Download as zip” option.

Due date: Friday, February 12

¹www.overleaf.com