

BO1.1. History of Mathematics

Sheet 3 — MT24

Reading for week 6:

- Stedall, Chapters 14, 15, 16 and 18
- Katz, Sections 21.1–21.3 and 22.1–22.3

(On derivatives and integrals, real and complex analysis, mathematical rigour, number theory, symbolic algebra, and the foundations of mathematics.)

Essay to be submitted ahead of the class in week 6:

Read the extract from Cayley's first paper on group theory (1854) (*Mathematics emerging*, §13.1.4). Explain its context, point out the most important aspects of its content, and assess its significance. (1,000 words)

After submitting your essay, you will be provided with a further short extract from Cayley's paper. Please read this and consider how different your essay would have been (if at all) if you had read this further extract first.

Discussion topics to be prepared for the class in week 6:

Choose your favourite AI platform and have a conversation with it on the theme of 'Who was the greatest mathematician of all time?' Ask it supplementary questions and challenge the assertions that it makes. We will structure a class discussion around the results that you find.