

**Original Sources exercise**

For this exercise you will consult an old book from the University Library (UB) collection. These books are subject to special regulations and you are not allowed to borrow them or even to take them away from the Reading Room. However, the books will be kept on hold until next week so that you can consult them after today. If you want to consult the book after today, go to the desk of “Bijzondere Collecties” and say that the book is on the “collegeplank wiskunde”. You will have to deposit a valid UB card or a valid ID to consult the book.

**Assignment:** Write a short paper in which you (groups of 2-3) discuss the old book of your choice. The intended audience of the paper is math teachers with very little historical training. Introduce them to the book and discuss opportunities to use (parts of) it in the classroom.

The size of the paper is about 1500 words  $\approx$  3 pages plus bibliography and (perhaps) figures. Hand in on Fri April 4.

**Evaluation** The emphasis is on writing a well-structured and understandable paper and on making a creative combination of mathematics, history, and teaching.

The paper should be clearly structured with an introduction including a statement or thesis; a main part in which you use your sources and where you present your arguments; and a conclusion that refers back to the introduction. The paper is a self-contained Dutch or English text with a bibliography and correct references (look in existing literature for examples).

Write in clear, concise, and unambiguous language. The paper contains no statements that you do not understand, unless they play an essential role in the text (then you must state which parts you do not understand).

If you use quotations then they are clearly marked as such and you provide references to the pages in the sources. All non-quoted text is originally yours: using text from other sources without a proper reference is considered plagiarism.

**For now,** start collecting data by answering the following questions. This will provide you with some raw material for the paper.

1. Write down the complete bibliographical information of your book: author(s) / editor(s) / translator(s), title, where and when published, publisher, imprint. For some of the books it is hard or impossible to give all information, so handle according to circumstances.
2. (at a later moment) Find out the biographical background of the author(s)/etc; when and where did he/they live, characterisation of work, . . . . You may use the Dictionary of Scientific Biography (DSB) and/or a national biographical dictionary; these are located on the first floor in the UB (shelves 9-11 adjacent to the help desk) and also in the library of the Mathematics Building. NB information is not available for some of the authors; if you cannot find anything then just report the sources you have tried. Another NB: sometimes the book itself gives you the only information.

3. Get an overall impression of the book. What is its purpose, what is the intended audience? The introduction and/or dedicatory letter is a good starting point, but also take the rest of the book into consideration. Discuss the structure and contents of the work (just copying the table of contents is generally a bad idea).
4. Compare the style of mathematics in the book with modern practices. Do you recognise certain elements that are characteristic of the era in which it was written? What has changed, what has remained? You could consider notation, concepts, techniques, proofs, subjects, whatever; your answer should be representative, not necessarily exhaustive. Illustrate your findings with specific examples.
5. Search for didactical opportunities this material could offer in class. E.g., you could use certain pages or illustrations as an introduction to a new subject; or use part of the book in a special project, . . . . Be creative; even if you think the book is utterly useless by modern textbook standards, then perhaps you could use it to illuminate aspects of notation, or the origins of a specific problem, or a social context, etc.