

BIOGRAPICAL SKETCHES OF MATHEMATICIANS

Assignment for Math 400- summer 2006- Alex Freire

List 1

Pierre de Fermat (1601-1665)	Jean D'Alembert (1717-1783)
John Wallis (1616-1703)	Joseph-Louis Lagrange (1736-1813)
Christiaan Huygens (1629-1695)	Pierre-Simon de Laplace (1749-1827)
Blaise Pascal (1623-1662)	Joseph Fourier (1768-1833)
Pierre de Maupertuis (1698-1759)	Adrien-Marie Legendre (1752-1833)
Alexis Clairaut (1713-1765)	Simeon-Denis Poisson (1781-1840)

List 2

Augustin Louis Cauchy (1789-1857)	Karl Weierstrass (1815-1897)
Niels Henrik Abel (1802-1829)	Pafnuti Lvovich Chebyshev (1821-1894)
Carl Gustav Jacob Jacobi (1804-1851)	Vito Volterra (1860-1940)
William Rowan Hamilton (1805-1865)	Jacques Hadamard (1865-1963)
Peter Lejeune Dirichlet (1805-1859)	Georg Cantor (1845-1918)
Joseph Liouville (1809-1822)	Henri Lebesgue (1875-1941)

You will write about one person from List 1, and one from List 2. Let me know your first and second choices from each list by Tuesday 6/13. I will try to get everybody on the lists covered (without duplication), so you may not get your first choice. To get an idea of who they are, you may consult Struik's text, or the web site:

<http://www-history.mcs.st-andrews.ac.uk/~history/>

(which, as you can see, has all the biographies already- but not in the prescribed format below)

FORMAT- The following questions have to be answered in your "biographical sketch", each in a separate paragraph. (Of course, there should also be an introductory paragraph with basic information-name, dates)

1-What was the political situation (or major political event) in the country where he lived, during the time he was professionally active? Did he participate? Is there any indication that it affected his career?

2-Where did he work? At a university? A scientific institute? Did he have lecturing duties- is there a record of students he advised, who became well-known mathematicians themselves? Which mathematicians (or scientists, or philosophers) did he interact with? Was he ever involved in any professional or political activity not directly related to mathematics?

3- What was his main research contribution, and what was its importance for the development of analysis (or applied analysis) at the time?

4- State precisely two important mathematical results attributed to him, and explain the statement and its importance in a language your classmates would be able to follow. If the person also made contributions to applied mathematics, at least one of the results must be in an applied area.

REFERENCES- You must include a list of references, both printed and web sites (URL). There should be at least four sources, and at least two must be printed material, as opposed to Web material (including at most one textbook for this course).

PLAGIARISM- is a serious offense; I am not unfamiliar with the concept of doing a web search. If I detect a straight copy of a sentence, without attribution, half your points are gone (first offense; there will not be a second). All the material you take from a source should be clearly attributed to the source. Extensive use of direct quotes (even with attribution) will result in point deductions. Moreover, you may be questioned on the material you turn in, to make sure you do understand what you wrote.

DEADLINES and GRADING- The List 1 bio is due Friday 6/23; The List 2 bio is due 7/6. These are firm deadlines! If you give me draft to look at about a week in advance, I will comment on it, and this is likely to improve your grade. Your work will be graded on content (whether the questions have been addressed, completeness, mathematical content) and on form (clarity and organization of the presentation.) Each biosketch is worth 20% of the course grade. Two to three pages (10 point, single spaced) sounds about right- one is too short, more than four probably too much.

Finally, please turn in a printed copy and e-mail a Word (or PDF) file to me. If you give me permission, I may post your work on the course web page (if it is good!)