

Math History for Precalculus

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1. When did l'Hospital (or l'Hôpital; pronounced loh pee TAWL) live? *1661–1704*
2. Where was he from? *France (Paris)*
3. Who was his teacher? *Jean (John) Bernoulli*
4. What theorem is named in his honor? *l'Hospital's rule*
5. How does this famous theorem relate to the topic of this chapter? *It explains how to find limits in cases of the form $\frac{0}{0}$ or $\frac{\infty}{\infty}$ (by finding the slope of the tangent lines to the two curves at the given value of x)*
6. Although l'Hospital's teacher had previously discovered his theorem, it was first published by l'Hospital. In which work was it published? *Analyse des infiniment petits pour l'intelligence des lignes courbes*
7. We cannot accuse l'Hospital of plagiarism. Why? *1) He paid Bernoulli to teach him and to send him discoveries by mail. Bernoulli had agreed that l'Hospital could use them as he wished. 2) Textbooks are not published as original material, and he did credit the Bernoullis (and Leibniz) in the preface.*
8. When was his work published? *1696*
9. Since much of this work was not original, why was the book so important? *As the first textbook on differential calculus, it was a major influence for the next century, spreading knowledge of calculus.*
10. Another of l'Hospital's works, not published until after his death, was important for similar reasons. Name this work. *Traité analytique des sections coniques (1707, On Conic Sections)*