Sonya Kovalevskaya

Born in 1850, Sofia (or Sonya) Kovalevskaya was a Russian mathematician who made contributions to partial differential equations and analysis. Sonya was interested in mathematics from childhood. She was first exposed to calculus by reading lecture notes which were used to paper the walls of her bedroom. Unable to enroll in any European university since she was a woman, she ended up with private lessons from the well-known mathematician Weierstrass. With his help, she received a doctorate in 1874 based on 3 original research papers she had written (no classes, no exams, and no defense). After difficulty in finding an academic job since she was a woman, she eventually got a faculty position at the University of Stockholm.

Required Reading

- Rappaport, Karen D. "S. Kovalevsky: A Mathematical Lesson." The American Mathematical Monthly, vol. 88, no. 8, 1981, pp. 564–574. doi:10.2307/2320506, www.jstor.org/stable/2320506.

Optional Reading

- **Sofia Vasilyevna Kovalevskaya**, https://mathshistory.st-andrews.ac.uk/Biographies/Kovalevskaya/
- **Sofia Kovalevskaya,** https://en.wikipedia.org/wiki/Sofia_Kovalevskaya
- **Math Equals: Biographies of Women Mathematicians+Related Activities**, by Teri Perl, Addison Wesley, ISBN 0-201-05709-3, p. 126 - 147
- **Women in Mathematics**, by Lynn M. Osen, MIT Press, ISBN 0-262-65009-6, p. 115-140