

Emmy Noether

Mother of Abstract Algebra



https://mathhistory.st-andrews.ac.uk/Biographies/Noether_Emma/pictdisplay/

Emmy Noether was a Jewish mathematician who fled Nazi Germany to teach at Bryn Mawr in the U.S. Unfortunately, she died soon after from complications from surgery for an ovarian tumor. She had a great ability for abstraction and proved many important results in abstract algebra. In the required reading, you will first read a short general audience summary of her life and works. The next reading is a short obituary by Albert Einstein, who was influenced by her work. The third reading is a more in-depth summary of Emmy Noether. The final required reading is an address given in her memory shortly after her death by famous mathematician Hermann Weyl. It is interesting because it gives a firsthand look at who she was in the words of someone who knew her well.

NOTE: 2 new biographies have recently been published about Emmy Noether. Follow the links to read reviews of each by Dr. Huffman

<https://www.maa.org/press/maa-reviews/emmy-noether-mathematician-extraordinaire>

<https://www.maa.org/press/maa-reviews/proving-it-her-way-emmy-noether-a-life-in-mathematics>

Required Reading

- **Mathematician Emmy Noether Should Be Your Hero: She revolutionized mathematics, and then was forgotten because she was a woman,** <https://www.smithsonianmag.com/smart-news/emmy-noether-should-be-your-hero-180962591/>
- **Emmy Noether: Professor Einstein Writes in Appreciation of a Fellow-Mathematician. To the Editor of The New York Times,** https://mathshistory.st-andrews.ac.uk/Obituaries/Noether_Emma_Einstein/
- **Amelie Emmy Noether: 1882–1935,** http://celebratio.org/Noether_E/article/110/
- **Memorial address: Emmy Noether by Hermann Weyl,** http://celebratio.org/Noether_E/article/111/

Optional Reading

- **Emmy Amalie Noether,** https://mathshistory.st-andrews.ac.uk/Biographies/Noether_Emma/
- **Emmy Noether,** https://en.wikipedia.org/wiki/Emmy_Noether
- **Math Equals: Biographies of Women Mathematicians+Related Activities,** by Teri Perl, Addison Wesley, ISBN 0-201-05709-3, p. 173-179
- **Women in Mathematics,** by Lynn M. Osen, MIT Press, ISBN 0-262-65009-6, p. 141-152
- **Emmy Noether: The Mother of Modern Algebra,** by M. B. W. Tent, A. K. Peters, 2008, 978-1568814308