

# History of Mathematics

Fifth Homework:

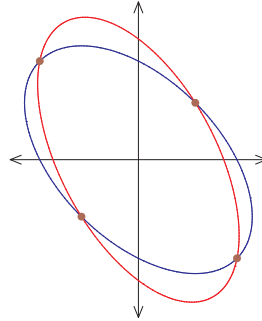
Due Monday 19 February 2024.

Math 629

14 February 2024

To hand in: We are using Gradescope for homework submission.

1. [25] Exercises 6.2.1 — 6.2.3 from Stillwell. The three steps each explained; for the first subtract the first equation from the second, two times. Here is a picture of the two curves:



2. [15] Exercise 6.5.3 from Stillwell. Also find the other two solutions (this may require reading my notes on cubics.)
3. [15] Here is another cubic to solve completely:  $2x^3 - 30x^2 + 162x - 350 = 0$ .
4. [25] Exercises 6.7.1, 6.7.2, and 6.7.3 in Stillwell. These should be relatively short.
5. [20] Cardano led an interesting life. Look up some material on the web (two sources besides our book) and write something about his life, both mathematical and otherwise. Probably two paragraphs, and try to include some story that is not in Stillwell's potted biography.