

UPDATED GENERAL INFORMATION — APRIL 24, 2018

New postings, recommended exercises, upcoming quiz

The files `gram-schmidt.pdf` and `gram-schmidt2.pdf` have concise and accurate formulas for the Gram-Schmidt orthogonalization process and verifications that the process has all the desired properties.

The recommended exercises for Chapter 6 are given in `exercises6.pdf` and `exercises6B.pdf` (the file `exercises6Afigure.pdf` is a drawing for an exercise in the first file). Solutions for exercises in the first file are posted, and solutions for the second file will be posted later.

The second quiz, which is scheduled for Thursday, May 3, will cover material from the files `math132notes6A.pdf` and `math132notes6B.pdf` and the Gram-Schmidt files cited above. Here is one further problem worth solving:

Let V be a complex inner product space with inner product $\langle p, q \rangle$, and let $x, y \in V$ such that $\langle x, y \rangle$ is a nonzero real number. Show that $\langle x, iy \rangle = -\langle iy, x \rangle$.