Linear Algebra 1 - Homework project / exercises

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My final solution in PDF for most of the assigned examples. Just FYI, I was supposed to develop exercises version 2.

Not relevant per se but this PDF contains a bit of various other (often unfinished or half-finished) exercises I did during the autumn 2024

Here're the results of my playing and learning with R and matrices + RMarkdown + a use of Latex inside the .Rmd files + rendering the files, etc., etc.

The content itself consists of solutions of some exercises I was assigned as my school homework project (above). The results came out by utilizing R package matlib which I accidentally discovered. The package describes itself as "Matrix Functions for Teaching and Learning Linear Algebra and Multivariate Statistics" which is very adequate description.

I didn't use the package for cheating! I did my assignments by hand with pencil and my brain only. Yet, after that, I just checked the results whether I was correct.

The reason why I put here the exercises computed by R is to prove my honesty (I arrived to the conclusions almost always in other way than R matlib's algorithms). In that case anybody can check that I haven't used the computer for doing my own homework instead of me. Besides that, it was immense fun to play with the software:-)

The PDF as well as HTML outputs of the exercises done by R and Rmarkdown are certainly not perfect. All the exercises obviously belong to the version 2:

- exercise 1 PDF, HTML
- exercise 2 PDF, HTML
- exercise 3 PDF, HTML
- exercise 4 PDF, HTML
- exercise 6 PDF, HTML

The whole repo with another bunch of various Rmarkdown files with related chaos, as the result of my process of learning, can be found at Github.