

## Math 54 Homework 4

Due Tuesday July 16

In section 3.1 of Lay, do 1, 3, 5, 7, 9, 13

In section 3.2 of Lay, do 1, 2, 21, 22, 24, 25

Some notation: in class I've been writing

$$\det \begin{pmatrix} 2 & 1 \\ 1 & 1 \end{pmatrix} = 1$$

for the determinant of a matrix. Lay often writes

$$\begin{vmatrix} 2 & 1 \\ 1 & 1 \end{vmatrix} = 1$$

for the determinant of a matrix. That is, if you write the matrix with large straight lines on the left and the right instead of large brackets or large parentheses, it means “take the determinant of the matrix”. This is mentioned after Example 1 in Lay 3.1.