## Homework 6

Linear Algebra, Dave Bayer, due April 1, 2014

Name: $\qquad$ Uni:

| $[1]$ | $[2]$ | $[3]$ | Total |
| :--- | :--- | :--- | :--- |
|  |  |  |  |

If you need more that one page for a problem, clearly indicate on each page where to look next for your work.
[1] Find the inverse of the matrix

$$
\left[\begin{array}{lll}
2 & 1 & 2 \\
1 & 2 & 0 \\
1 & 3 & 0
\end{array}\right]
$$

[2] Find the eigenvalues and corresponding eigenvectors of the matrix

$$
A=\left[\begin{array}{ll}
-2 & 2 \\
-2 & 3
\end{array}\right]
$$

[3] Find the eigenvalues and corresponding eigenvectors of the matrix

$$
A=\left[\begin{array}{lll}
1 & 1 & 0 \\
1 & 1 & 0 \\
2 & 1 & 1
\end{array}\right]
$$

