

ASSIGNMENT #3: MATH 471
Due: Monday, September 30, 2008.

1. From Section 4.1, do problems 4, 17, and 19.
2. From Section 4.2, do problems 32 and 33.
3. Hand in listings of your code for the following two problems:
 - (a) Modify the code `AOTwoD.m` from the web site so that it uses, instead of Gaussian elimination, a Cholesky factorization of the coefficient matrix \mathbf{A} . (This is actually what is done on many AO systems in practice.) Your modification should only involve adding one line of code and changing another. And be sure to use the backslash function, not MATLAB's `inv` function!
 - (b) Do the same thing as in the previous problem with `BlurringLabTwoD.m` from the web site.