

5.1 pp 280-281 #2, 4, 8, 14, 18, 32, 33

5.2 pp 288-289 #2, 10, 16, 18, 20, 31, 32 ---READ the paragraph before the statement of problem #31, if you do not then you will definitely be stuck :), 35\*

5.3 pp 295-297 #1, 6, 10, 12, 20, 29, 37, 38

To find the characteristic polynomial in terms of the variable x:

```
syms x
A = sym([1 1 0; 0 1 0; 0 0 1]);
polyA = charpoly(A,x)
This returns the characteristic polynomial:  $x^3-3x^2+3x-1$ 
```