

# MA511 HW29 Sol.

#5.2.2

Sol.  $A = \begin{bmatrix} -5 & 18 \\ -3 & 10 \end{bmatrix}$

from  $\begin{bmatrix} 3 & 2 \\ 1 & 1 \end{bmatrix}$ ,  $\begin{bmatrix} 1 & 0 \\ 0 & 4 \end{bmatrix}$   $\begin{bmatrix} 1 & -2 \\ -1 & 3 \end{bmatrix}$

trace = 5

det = 4

#5.2.6

Sol.

(a)  $\lambda^2 = 1$

So,  $\lambda = 1$  or  $\lambda = -1$

(b) trace = 0

det = -1

(c) Second row 8, -3, from the trace and determinant.