

代幾 I 計算演習 (2005/11/24)

Q.1

$$\begin{vmatrix} 0 & -2 & 0 & 9 \\ 0 & 1 & 0 & -3 \\ 1 & 0 & 0 & 0 \\ 0 & -3 & 3 & -6 \end{vmatrix}$$

Q.2

$$\begin{vmatrix} -4 & -1 & 1 & -1 & 2 \\ -4 & 1 & 2 & -2 & 0 \\ 0 & 0 & 0 & 1 & 0 \\ 0 & -2 & 1 & -1 & 1 \\ 2 & 1 & -1 & 1 & -1 \end{vmatrix}$$

Q.3

$$\begin{vmatrix} 4 & -3 & -2 & -4 \\ -2 & 3 & 1 & 2 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & -2 & 2 \end{vmatrix}$$

Q.4

$$\begin{vmatrix} 1 & -5 & 1 & 7 \\ 0 & 0 & -4 & 2 \\ 0 & 0 & 2 & 0 \\ -1 & 7 & 5 & -13 \end{vmatrix}$$

Q.5

$$\begin{vmatrix} -2 & 7 & 0 & 0 & 0 \\ 4 & -11 & 0 & 0 & 0 \\ -1 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 3 & -3 \\ 0 & -1 & 0 & 0 & 1 \end{vmatrix}$$

Q.6

$$\begin{vmatrix} 0 & 0 & 0 & -2 & 3 \\ -3 & 1 & 2 & -2 & 8 \\ -3 & 6 & 0 & 0 & -3 \\ 0 & 0 & 0 & 2 & 0 \\ 2 & -1 & -1 & 0 & -6 \end{vmatrix}$$

Q.7

$$\begin{vmatrix} 1 & 0 & 1 & -1 \\ 0 & -2 & -2 & 2 \\ 0 & 0 & 3 & 0 \\ -1 & 2 & -1 & 1 \end{vmatrix}$$

Q.8

$$\begin{vmatrix} -2 & 4 & -2 & 0 & 0 \\ -6 & 9 & 5 & 0 & 0 \\ 0 & -2 & 0 & -3 & 2 \\ 0 & 0 & 0 & 3 & 0 \\ 8 & -11 & -1 & 3 & -2 \end{vmatrix}$$

Q.9

$$\begin{vmatrix} 0 & 0 & 0 & 1 \\ -9 & 0 & 3 & -5 \\ 3 & 0 & 0 & 0 \\ 0 & 3 & -3 & -1 \end{vmatrix}$$

Q.10

$$\begin{vmatrix} -3 & 3 & 3 & -3 & -3 \\ 0 & 3 & 0 & 1 & -3 \\ 1 & -3 & 0 & 0 & 1 \\ 3 & 3 & -3 & 2 & 0 \\ 0 & -3 & 0 & 0 & 3 \end{vmatrix}$$