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**Second Exam**  **MATHEMATICS  FOR COMPUTING**  **22–12–2005**

1  (4 points)  Find the solutions using Cramer's Rule.

$$x - 5y = 1$$
$$2x - 3y = 3$$

2  (5 points)  Find the solutions using the inverse of A.

$$x + z = 1$$
$$y + z = 2$$
$$x + y = 3$$

3  (5 points)  Find the solutions using Gauss Jordan.

$$A + 2B - 5C + D - 3E = 6$$
$$B + 4C - 2D + E = 1$$
$$D + 9E = 5$$

4  (6 points)  Find the determinant of A.

$$A = \begin{bmatrix} 2 & 5 & -3 & -2 \\ -2 & -3 & 2 & -5 \\ 1 & 3 & -1 & 2 \\ -1 & -6 & 4 & 3 \end{bmatrix}$$