**Mathematical Methods Tutorial Sheet 6 Matrices**

**Q1.** Find A-1, the inverse of A and show that A.A-1 = I, where I is the identity matrix.

A =

**[ans: A-1 = = ]**

**Q2.** Use **inverse method** to solve for the unknowns in the following linear equations:

2x + 6y = 22

-x + 5y = 53 [ans: x = -13, y = 8]

**Q3.** Use **inverse method** to solve for the unknowns in the following linear equations:

4x - 5y = 37

7x + 10y = -29 [ans: x = 3, y = -5]

**Q4.** Use **Cramer’s rule** to solve for the unknowns in the following linear equations:

2x + 6y = 22

-x + 5y = 53 [ans: x = -13, y = 8]