Ponce Martin 10371381 Date 20/10/2014

Family name Given name Student number

**ENS1161 Computer Fundamentals**

**Test 11**

(a) Given:

 and  ,

find the product AB.



(b) (i) Find the inverse of the matrix 



(ii) Use the result of part (i) to solve the system of equations:

2x - y = 4

x - 3y = -3



(c)

1

2

−1

−1

2

1

A

B

C

D

E

Find the images A', B', C', D' and E’ of the vertices of the polygon ABCDE under the transformation represented by the matrix



E

A' = 0, -2, B' = 0, -1, C' = -1, -1, D' = -1, 1, E’ = 1, 1

Then draw the image A'B'C'D'E' of the polygon on the set of axes provided.

2

4

−2

2

4

0

-4

−2

−4

[2 + 2 + 2 + 4 = 10 marks ]