Please indicate your answers by entering the option ((i), (ii), (iii) or (iv)) where asked. You should append the completed document as a pdf with your type written worked solutions and upload to Blackboard by Friday 22nd of February 2019.

Q 2.31   matlab code included.

Part (a):

   (i) 4
   (ii) 13
   (iii) 26
   (iv) 18

Your Answer (i)-(iv): (ii) 13

Part (b):

   (i)   0
   (ii)   12
   (iii)   7
   (iv)   4

Your Answer (i)-(iv): (i) 0

Q 3.2   mathematically worked solution included.

Part (a):

   (i)   0.1241
   (ii)   0.8125
   (iii)   0.074995
   (iv)   0.003462

Your Answer (i)-(iv):   (ii) 0.8125

Part (b):

        (i)   0.72481
        (ii)   0.85261
        (iii)   0.62849
        (iv)   0.17238

Your Answer (i)-(iv):   (ii) 0.85261

Part (c):

        (i)   0.65782
        (ii)   0.59371
        (iii)   0.45802
        (iv)   0.85261

Your Answer (i)-(iv):   (iv) 0.85261

Q 4.24 mathematically worked solution included.

(i)   Inverse(a)=

-0.7143	0.0	1.4286
0.2571	0.1000	0.2857
-0.2286	-0.2000	0.8571

Inverse(b)=

1.6667	2.8889	-2.2222	1.0000
0.0	0.3333	-0.3333	0.0
-0.3333	-0.4444	0.1111	0.0
1.5000	2.0000	-1.5000	0.5000

(ii)

Inverse(a)=

0.7243	0.0	1.3286
1.2571	0.1000	0.2757
-0.2386	-0.2010	0.9571

Inverse(b)=

1.6677	2.9889	3.2222	1.01700
0.3433	-0.3433	0.3333	0.00371
-0.3433	-0.2879	0.2111	0.0
1.2400	2.0120	-1.5783	0.5600

(iii)

Inverse(a)=

0.7143	0.003	2.3276
1.2671	0.1100	0.3759
-0.2486	-0.2110	0.9771

Inverse(b)=

1.6877	3.9789	3.2002	2.01800
0.3533	-0.4433	0.3333	0.02371
-0.3443	-0.2999	0.3121	0.0382
1.2420	3.0130	-1.5733	0.5610

(iv)

Inverse(a)=

0.8343	1.01	1.3336
2.2572	0.1003	0.3857
-0.2486	-0.2110	0.9671

Inverse(b)=

1.6777	4.9889	3.2232	1.11700
0.3443	-0.3443	0.3233	0.07371
-0.3443	-0.2979	0.3211	0.07800
1.2480	2.1220	-1.5883	0.5621

Your Answer (i)-(iv):   (i)