

**NAME:**

**STUDENT NUMBER:**

**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 22<sup>nd</sup> of February 2019.**

**Q 2.31**

Part (a):

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

**Your Answer: (ii)**

Part (b):

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

**Your Answer: (i)**

### Q 3.2

Part (a):

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

**Your Answer: (ii)**

Part (b):

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

**Your Answer: (ii)**

Part (c):

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

**Your Answer: (ii)**

**Q 4.24****(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)**