**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**

Part (a):

1. 4
2. **13**
3. 26
4. 18

**Your Answer:** (ii)

Part (b):

1. **0**
2. 12
3. 7
4. 4

**Your Answer:** (i)

**Q 3.2**

Part (a):

1. 0.1241
2. 0.08294
3. 0.074995
4. 0.003462

**Your Answer: ? 0.875**

Part (b):

1. 0.72481
2. **0.85261**
3. 0.62849
4. 0.17238

**Your Answer:** (ii)

Part (c):

1. 0.65782
2. 0.59371
3. 0.45802
4. **0.85261**

**Your Answer:** (iv)

**Q 4.24**

1. **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)