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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):

- (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: (iv)

Q 4.24

| (i) Inverse(a)= | | | | |
|---------------------------------------|--|---|--|--|
| -0.7143 0.2571 -0.2286 | 0.0 0.1000 -0.2000 | 1.4286 0.2857 0.8571 | | |
| Inverse(b)= | | | | |
| 1.6667 0.0 -0.3333 1.5000 | 2.8889 0.3333 -0.4444 2.0000 | -2.2222 -0.3333 0.1111 -1.5000 | 1.0000 0.0 0.0 0.5000 | |
| (ii) | | | | |
| Inverse(a)= | | | | |
| 0.7243 1.2571 -0.2386 | 0.0 0.1000 -0.2010 | 1.3286 0.2757 0.9571 | | |
| Inverse(b)= | | | | |
| 1.6677 0.3433 -0.3433 1.2400 | 2.9889 -0.3433 -0.2879 2.0120 | 3.2222 0.3333 0.2111 -1.5783 | 1.01700 0.00371 0.0 0.5600 | |
| (iii) | | | | |
| Inverse(a)= | | | | |
| 0.7143 1.2671 -0.2486 | 0.003 0.1100 -0.2110 | 2.3276 0.3759 0.9771 | | |
| Inverse(b)= | | | | |
| 1.6877 0.3533 -0.3443 1.2420 | 3.9789 -0.4433 -0.2999 3.0130 | 3.2002 0.3333 0.3121 -1.5733 | 2.01800 0.02371 0.0382 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)