

ANSWERS TO REVIEW PROBLEMS FOR EXAM #2

1) C

2) C

3) A

4) A

5) B

6)
$$\begin{bmatrix} 1 & 0 & 3 & | & 9 \\ 0 & 1 & -3 & | & 2 \\ 0 & 0 & -11 & | & 11 \end{bmatrix}$$

7) (1,2,3)

8) D

9) C

10) I think that they mean for B to be the correct answer, but the first equation in the system should be $5x - 2y - 2z = 1$

11) a)
$$\begin{bmatrix} 1 & 0 & -1 \\ 0 & 1 & 2 \\ 0 & 0 & 1/2 \end{bmatrix}$$

b) $x = -2, y = 8, z = 3/2$

12) (3, 1, 6)

13) C

14) You can check this answer yourself. Use your answer along with the input-output matrix to find D.

15) No answer provided

16) No answer provided

17) a) 15 b) No

18) A

19)

20) a) $1/8$ b) $1/2$ c) $3/4$ d) $15/16$

21)

k	1	2	3			
P(X=k)	$3/5$	$3/10$	$1/10$			

22)

k	1	2	3	4	5	6
P(X=k)	$1/36$	$3/36$	$5/36$	$7/36$	$9/36$	$11/36$

23) .6778

24) .3557

25) .2099

26)

k	0	1	2	3	4	5
P(X=k)	.2373	.3955	.2637	.0829	.0146	.0010

b) 1.25

27) $\mu_X = 1.1$

$$\sigma_X^2 = 1.09$$