## Math 1229A Test 2, November 2017 Answers – Code 111

Part A

Part B

19. (a) 
$$\begin{bmatrix} 1 & 0 & 0 & | & 4 \\ 0 & 1 & 0 & | & 7 \\ 0 & 0 & 1 & | & 0 \end{bmatrix}$$
,  $(4,7,0)$  (b) 
$$\begin{bmatrix} 1 & -1 & 1 & | & 0 \\ 0 & 0 & 0 & | & 1 \\ 0 & 0 & 0 & | & 0 \end{bmatrix}$$
, no solution (c) 
$$\begin{bmatrix} 1 & -1 & 0 & | & -1 \\ 0 & 0 & 1 & | & 2 \\ 0 & 0 & 0 & | & 0 \end{bmatrix}$$
,  $(-1+t,t,2)$ 

20. 
$$A^{-1} = \begin{bmatrix} 7 & -4 & 2 \\ -2 & 1 & 0 \\ 3 & -2 & 1 \end{bmatrix}$$