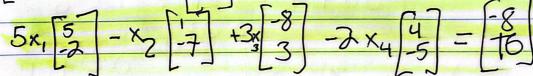
(,8,8,4,10,12,13,15,00,00,00,06,32,40 s.t. 1.4

Nathan LunceFood

## 1.4 Homework

Ax = undefined because there are loss columns than x;

5. 
$$\begin{bmatrix} 5 & 1 & -8 & 4 \\ -2 & -7 & 3 & -5 \end{bmatrix}$$
  $\begin{bmatrix} 5 \\ -2 \end{bmatrix}$   $\begin{bmatrix} -8 \\ -2 \end{bmatrix}$ 



7. 
$$\begin{bmatrix} 4 & -5 & 7 \\ -1 & 3 & -8 \\ 7 & -5 & 0 \\ 4 & 1 & 2 \end{bmatrix} \begin{bmatrix} 6 \\ x_1 \\ x_2 \\ 7 \\ 7 \end{bmatrix}$$

10. 
$$8x_1 - x_2 = 4$$

$$5x_1 + 4x_2 = 1$$

$$x_1 - 3x_2 = 2$$

$$8 - 1$$

$$5 = 4$$

$$1 - 3$$

$$x_2 = 2$$

$$1 - 3$$

X,15,02 12 2 Re- (121,0) -R2+R3->R3 (121,0 12110 -2R2+R1-7R1 1 0101963 R3+R174 011/8 16 -R3+R2-7R2 3R1+R27R2 2R1+233 R3 4 3 4 0-8-12 4 112 -8 0 has a Solution: wis in R3 

=

9

F

5

5

515

1

15,22,25,26,35,40 1-5/5/ = no solutions 0 0 4 62 0 -3 -1 62 -2 8 -5 63 22. Yes because a solution 25. (4,63) = (3,-4,2)  $26. (x_1, x_2) = (3, 5)$ n pivot columns = R and not Rm becaus mon 40. Spans Ru because has pivot in every row 1

