Lecture 8 problems

8.1

Ca: By way of contradiction, the coefficient of x_0 is not one when it must be.

Cb: The null space of a system must contain all linear combinations of the values in that space.

Cc: ~~There is at~~ For any system there is the solution $X=0$.

8.2

For $Rx = 0$, we get

$$x = \begin{bmatrix} -2 \\ 1 \\ 0 \end{bmatrix}$$ and

for

$Rx = d$, we get

$$x = \begin{bmatrix} -3 \\ 1 \\ 2 \end{bmatrix}$$

8.3

True