

Source:

- 1 | **See Before: homogeneous equations**
- 2 | **Homogeneous systems of linear equations with more variables than equations has nonzero solutions (Axler3.26)**
- 3 | **Inhomogeneous systems of linear equations with more equations than variables have no solution for some choice of constant terms**
- 4 | **methodology**

Basically turn it into a linear map and then abuse the injective/surjective theorems