

# Systems of Linear Equations Exercises

All the exercises are from Simon & Blume.

1. Exercise 7.11.
2. Exercise 7.16
3. Exercise 7.17.
4. Exercise 7.18.
5. Exercise 7.19.
6. Exercise 7.22.
7. Exercise 7.23.
8. Exercise 7.24. (Hint: We have to show two things here – that a nonsingular square matrix  $A$  necessarily has row echelon forms with no zeros on the diagonal, and that a square matrix  $A$  that has row echelon forms with no zeros on the diagonal is necessarily nonsingular.)