



LINEAR ALGEBRA
SPRING 2024

ASSIGNMENT 5.2
DUE FEBRUARY 14

Exercise 1. Textbook exercise 2.2.18

Exercise 2. Textbook exercise 2.2.20. Be sure to show that A is invertible before computing A^{-1} .

Exercise 3. Textbook exercise 2.2.21. Be sure to show that A , B and C are invertible before computing B^{-1} .

Exercise 4. Textbook exercise 2.2.26

Remark. Feel free to use the following facts about $n \times n$ matrices A , B :

1. If $AB = I$, then A is invertible and $A^{-1} = B$.
2. If $BA = I$, then A is invertible and $A^{-1} = B$.

As the textbook says (p. 52) “For square matrices, an inverse on one side is automatically an inverse on the other side.”