

Homework 2
due Friday, Feb. 6

Reading for Lectures 4-5:

- Hill, sections 1.4–1.5

Problems:

- Section 1.4, Ex. 10, 12, 14. How would the answer change if you allow the matrix to be a product of two elementary matrices?
- 1.4, Ex. 28, 32
- 1.4, Ex. 36, with this modification: show that C is invertible if and only if both A and B are, and express C^{-1} in terms of A^{-1} and B^{-1} .
- 1.4, Ex. 37. Be sure the formula you “guess” is actually the right one (it’s in the back of the book if you need a hint)—then prove that it is correct in general, not just for the example in the exercise.
- 1.4, Ex. 40, 49.