

**MA 514 Homework #4**  
Due Monday, October 13, in Class

Graduate students should do all of these problems. Undergraduate students should do at least four but are welcome to do all five.

1. Problem 3C.
2. Problem 3F. But note that the hint is wrong: To color numbers  $1, \dots, n$  you need to consider a complete graph  $K_{n+1}$ , not  $K_n$ .
3. Problem 3H.
4. Problem 4B.
5. Problem 4C.