### 18.701 Problem Set 3

due Wednesday, September 29

1. Chapter 2, Exercise M.6a,b (paths in $\mathbb{R}^{k}$ )
2. Chapter 2, Exercise M. 7 (paths in $G L_{n}$ )
3. Chapter 2, Exercise M. 8 ( $S L_{n}$ is connected)
4. Chapter 3, Exercise 1.11 ( a field with nine elements)
5. Chapter 3, Exercise 4.4 (order of $G L_{2}\left(\mathbb{F}_{p}\right)$ )

MIT OpenCourseWare
http://ocw.mit.edu

### 18.701 Algebra I

Fall 2010

For information about citing these materials or our Terms of Use, visit: http://ocw.mit.edu/terms.

