

Analysis in \mathbb{R}^n
Math 203, Section 30
Autumn Quarter 2007
Written Exercises from Tuesday, October 16

Exercise 0.0.1 Let V is an n -dimensional vector space over F , and let U and W be $(n-1)$ -dimensional subspaces of V .

- i.* Prove that $n - 2 \leq \dim(U \cap W) \leq n - 1$.
- ii.* Prove that if $U \subset W$, then $U = W$.