Readings and Discussion Questions

Thursday October 26

Read Chapters: $5.5, 5.6.1$

Discussion Questions

1. If $u \in W^{1,p}(U)$ and $Tu = 0$ on ∂U (assuming that ∂U is C^1), if we extend u to $\mathbb{R}^n$ by setting u to equal zero in the complement of U, is the extension in $W^{1,p}(\mathbb{R}^n)$

2. Is there an analogue of the trace theorem where you restrict to a hypersurface in U rather than the boundary?

3. What is the relationship between Theorem 1 pg. 277 and Theorem 2 pg. 279?