## Additional Problems Assignment 11

1. Let $(X, \mathcal{T})$ and $(Y, \mathcal{S})$ be topological spaces with $A \subseteq X$. Let $f: X \rightarrow Y$ be a continuous $(\mathcal{T}-\mathcal{S})$ function. Show that $\left.f\right|_{A}: A \rightarrow Y$ is $\mathcal{T}_{A}-\mathcal{S}$ continuous, where $\mathcal{T}_{A}$ is the subset topology on $A$.
