

Cor 3.3 Cor 3.9 Apply Thm 3.8, taking $f = \text{id}$

(c) Prop 3.11 $\xrightarrow{p \mapsto 2p_1} \text{in } X$
~~Given~~ \neq Given open $U \ni p$

Then $U \cap S$ open in S $\Leftrightarrow \exists N$ s.t. $\forall i \geq N$, $p_i \in U \cap S$ \square

Ex. (d) durs (e), (f) use the durs laws

~~Let X be a top space, S a subsp~~

~~Let $A = a_1, \dots, a_n$~~

Ex 3.13 $\mathcal{L}_S: S \hookrightarrow X \wr \text{Aut}(\text{Im}(\mathcal{L}_S)) \cong S_{|S|}$ is cts
with cts inverse so dnr.

 ~~$F: \mathbb{R} \rightarrow \mathbb{R}^2$ injective cts map $F(s) = (s, s^2)$~~