Remark 3.8 Let X be a pseudocompact space and $|X| \geq \aleph_0$. Then

1. $\beta(X \times T(|\beta X|^+ + 1)) = \beta X \times T(|\beta X|^+ + 1)$
2. $\beta(X \times T(|\beta X|^+)) = \beta X \times T(|\beta X|^+ + 1)$

Proof. Since X is pseudocompact and $T(|\beta X|^+ + 1)$ is compact, by **Fact 3.1**, $X \times T(|\beta X|^+ + 1)$ is pseudocompact. By Glicksberg's Theorem, $\beta(X \times T(|\beta X|^+ + 1)) = \beta X \times \beta T(|\beta X|^+ + 1) = \beta X \times T(|\beta X|^+ + 1)$ This proves the first statement.

By **Fact 3.2**, $X \times T(|\beta X|^+)$ is pseudocompact. By Glicksberg's Theorem, $\beta(X \times T(|\beta X|^+)) = \beta X \times \beta T(|\beta X|^+) = \beta X \times T(|\beta X|^+ + 1)$.