c) $map_*(BG, X) \underset{wk}{\simeq} * \underset{wk}{\simeq} map_*(BH, X) \Longrightarrow$

$map_*(B(G \times H), X) \simeq *$

Proof: a) $\exists$ fibration $G \to EG \to BG$, $EG \simeq *$

b) $\exists$ fibration $BG \to BT \to BH$

c) : b) $\Rightarrow$ c).

Step 5. $G$ abelian + $map_*(B\mathbb{Z}/p, X) \simeq_{wk} *$

+ $X$ $p$-complete $\Longrightarrow$

$map_*(K(G,2), X) \simeq_{wk} *$

Proof: $\exists$ exact $0 \to T \to G \to F \to 0$,

$T$ torsion, $F$ torsion free.

Step 6. $map_*(B\mathbb{Z}/p, X) \simeq_{wk} *$ +

$X$ $p$-complete $\Longrightarrow$

$map_*(K(\pi, n), X) \simeq_{wk} *$

$\forall$ abelian $\pi$, $n \geq 2$

($\forall$ torsion abelian $\pi$, $n \geq 1$)

Proof: $K(\pi, n) = B\,K(\pi, n-1)$