$\emptyset \neq T \supseteq A, B, C, \Delta :=$ mult. factori distincti.

$T := A \cup B \cup C \cup \Delta \cup \{0\}$

P.t. $(\forall X \subseteq T)$ $\quad \bar{X} := T \setminus X$

(1) $A \cap B \subseteq C \triangle \Delta$ /nc; $\quad C \triangle \Delta = (C \setminus \Delta) \cup (\Delta \setminus C)$

(2) $B \cap C \subseteq (A \cap \Delta) \cup (\bar{A} \cap \bar{\Delta})$ /nA

(3) $\bar{A} \cap \bar{B} \subseteq \bar{C} \cap \bar{\Delta}$ ($\subseteq C$)

(i) $\bar{A} \cap \bar{B} \subseteq \bar{C}$ //

(ii) $A \cup B \cup C = \emptyset$

(1) $A \cap B \cap C \subseteq (C \triangle \Delta) \cap C$

$= [(C \setminus \Delta) \cup (\Delta \setminus C)] \cap C$

$= ((C \setminus \Delta) \cap C) \cup ((\Delta \setminus C) \cap C)$ ($\emptyset$)

$= C \setminus \Delta$

(1) $\Rightarrow$ $\boxed{A \cap B \cap C \subseteq C \setminus \Delta}$

(2) $A \cap B \cap C = ((A \cap \Delta) \cup (\bar{A} \cap \bar{\Delta})) \cap A$ ($\emptyset$)

$\Rightarrow$ distr. $\cap$ față de $\cup$ // $\bar{A} \cap A \cap \Delta = \emptyset$

$(A \cap \Delta \cap A) \cup (\bar{A} \cap \bar{\Delta} \cap A) = A \cap \Delta$

$A \cap A \cap \Delta = A \cap \Delta$ $\quad \emptyset$

$\boxed{A \cap B \cap C \subseteq A \cap \Delta}$

$A \cap B \cap C \subseteq (C \setminus \Delta) \cap (A \cap \Delta) = (C \setminus \Delta) \cap (\Delta \cap A)$ ($\emptyset$) $\Rightarrow$

$\Rightarrow A \cap B \cap C = \emptyset$