$P(A \cap \overline{B}) = A$ ohne $B = P(A) - P(A \cap B)$

$P(A \cap \overline{B}) = \overline{A} \cup B$

$P(A \cup B) = P(A) + P(B) - P(A \cap B)$

$(\overline{A} \cap \overline{B}) = \overline{(A \cup B)}$ de Morgan

31) c) $(\overline{A} \cap \overline{B}) \cup C = (A \cup B)^c \cup C = ((\underbrace{A \cup B}_{X}) \cap C^c)^c$

$\overset{!!}{=} (X \cap \overline{C})^c = 1 - (X \cap \overline{C})$

$= 1 - (P(X) - \underbrace{P(X \cap C)}_{\underbrace{P((A \cup B) \cap C)}}) = 1 - (A + B - A \cap B - 0{,}35) = 1 - 0{,}35$

$= \underline{\underline{0{,}65}}$

$P((A \cap C) \cup (C \cap B)) =$

$0{,}25 + 0{,}1$

d) $(\bar{A} \cap \bar{B}) \cap C = (\underbrace{A \cup B}_{X})^c \cap C$

$= P(C) - (P(\underbrace{X \cap C}))$

$P((A \cup B) \cap C) = P((A \cap C) \cup (B \cap C))$

$= 0{,}5 - (0{,}25 + 0{,}1)$

e) $(\bar{A} \cup \bar{C}) \cap B = (\underbrace{A \cap C}_{X})^c \cap B = \bar{X} \cap B =$

$= P(B) - \underbrace{P(X \cap B)} = 0{,}5 - 0{,}08 = 0{,}42$

$P(A \cap C \cap B) = 0{,}08$

Interpretation fehlt