

22.

a)

A	B	$A \vee B$	$A \overset{\text{paiss.}}{\neg} B$	$A \wedge B$
1	1	1	0	1
1	0	1	1	0
0	1	1	1	0
0	0	0	0	0

$$b) (A \wedge B) \vee (\neg A \wedge \neg B) = P$$

Implikaatio ja ekvivalenssi

- ekvivalenssi $A \Leftrightarrow B$

A	B	$A \Leftrightarrow B$	$A \Rightarrow B$
1	1	1	1
0	1	0	1
1	0	0	0
0	0	1	1

- implikaatio $A \Rightarrow B$

49.

A	B	C	$\neg B$	$A \vee \neg B$	$\neg C$	P	Q	R
1	1	1	0	1	0	0	1	1
1	0	0	1	1	1	1	0	1
0	1	0	0	0	1	1	1	0
0	0	1	1	1	0	0	1	1
0	1	1	0	0	0	1	1	1
1	0	1	1	1	0	0	1	1
1	1	0	0	1	1	1	0	1
0	0	0	1	1	1	1	1	0

$A = \text{"Ani syahin"}$
 $B = \text{"Bengt syahin"}$
 $C = \text{"Calle syahin"}$

$V: A$ syalline,
 Bengt is Calle syahin'a

Todis-
 tajat: $P = A \vee \neg B \Rightarrow \neg C$
 $Q = A \Rightarrow C$

$R = A \vee C$

53.

A	B	$A \Rightarrow B$	P
1	1	1	1
1	0	0	0
0	1	1	0
0	0	1	0

$P = A \Leftrightarrow (A \Rightarrow B)$ Sama kuin $A \wedge B$

45. $A = \text{"Tiina ♥"} , B = \text{"Maija ♥"}$

A	B	P	Q
1	1	1	1
0	1	1	1
1	0	0	0
0	0	0	1

TOSIA $\left\{ \begin{array}{l} P = A \vee B \\ Q = A \Rightarrow B \end{array} \right.$

V: Tiina ja Maija tai
vain Maija