

$$\text{Aussagen } A = \begin{cases} W & A \text{ wahr} \\ F & A \text{ falsch} \end{cases}$$

$$\bar{A} \text{ nicht } : \begin{array}{c|c} A & \bar{A} \\ \hline W & F \\ F & W \end{array}$$

$$A \overset{\curvearrowright}{\text{impliziert}} B = B \vee \bar{A} : \begin{array}{c|cc} A:B & W & F \\ \hline W & W & F \\ F & W & W \end{array}$$

$$A \curvearrowright B = B \vee \bar{A}$$

$$\begin{array}{c|cc} A:B & W & F \\ \hline \bar{A}:B & W & F \\ W & F & W & F \\ F & W & W & W \end{array}$$

$$B \perp A = B \wedge \bar{A} : \begin{array}{c|cc} A:B & W & F \\ \hline \bar{A}:B & W & F \\ W & F & F & F \\ F & W & W & F \end{array}$$

$$\overline{A \wedge B} \stackrel{\text{de Morgan}}{=} \bar{A} \vee \bar{B}$$

$$A \wedge B : \begin{array}{c|cc} A:B & W & F \\ \hline W & W & F \\ W & F & F \end{array} \Rightarrow \overline{A \wedge B} : \begin{array}{c|cc} A:B & W & F \\ \hline W & F & W \\ W & W & W \end{array}$$

$$\bar{A} \vee \bar{B} : \begin{array}{c|cc} A:B & W & F \\ \hline \bar{A}:B & F & W \\ W & F & F & W \\ F & W & W & W \end{array}$$

$$\overline{A \vee B} \stackrel{\text{non de Morgan}}{=} \bar{A} \wedge \bar{B}$$

$$A \vee B: \begin{array}{c|cc} A:B & W & F \\ \hline W & W & W \\ W & W & F \end{array} \Rightarrow \overline{A \vee B}: \begin{array}{c|cc} A:B & W & F \\ \hline W & F & F \\ W & F & W \end{array}$$

$$\bar{A} \wedge \bar{B}: \begin{array}{c|cc|cc} A:B & & W & F \\ \hline & \bar{A}:\bar{B} & F & W \\ \hline W & F & F & F \\ F & W & F & W \end{array}$$

$$A \wedge F \stackrel{\text{neutral}}{=} F$$

$$A \vee F = A$$

$$A \wedge W = A$$

$$A \vee W = W$$

$$\bar{A} \wedge A \stackrel{\text{inverse}}{=} F$$

$$\bar{A} \vee A = W$$

$$A \curvearrowright B \stackrel{\text{Konttra position}}{=} \bar{B} \curvearrowright \bar{A}$$

$$\overline{\bigwedge_i A_i} \stackrel{\text{family de Morgan}}{=} \bigvee_i \bar{A}_i$$

$$\overline{\bigvee_i A_i} \stackrel{\text{family non de Morgan}}{=} \bigwedge_i \bar{A}_i$$