

Übung: Boolesche Algebra

1 Vereinfachen Sie folgende Terme

1.1

$$(\bar{A} \vee \bar{B}) \wedge (\bar{A} \vee B) \wedge (A \vee \bar{B})^1$$

1.2

$$(A \wedge B) \vee (A \wedge C) \vee (B \wedge \bar{C})^2$$

1.3

$$(A \wedge \bar{B}) \vee (A \wedge \bar{B} \wedge C)^3$$

1.4

$$(A \vee \overline{B \wedge A}) \wedge (C \vee (D \vee C))^4$$

1.5

$$(\overline{A \wedge B} \vee \bar{C}) \wedge (\bar{A} \vee B \vee \bar{C})^5$$

1.6

$$\overline{A \wedge B} \vee \bar{C} \vee (A \wedge C)^6$$

1.7

$$(A \vee B) \wedge (\bar{A} \vee B) \wedge (A \vee \bar{B}) \wedge (\bar{A} \vee \bar{B})^7$$

1.8

$$A \vee (\bar{B} \wedge \overline{A \vee B \vee C})^8$$

¹Lösung: $\bar{A} \wedge \bar{B}$

² $(A \wedge C) \vee (B \wedge \bar{C})$

³ $A \wedge \bar{B}$

⁴ $C \vee D$

⁵ $\bar{A} \vee \bar{C}$

⁶ $A \wedge (B \vee C)$

⁷0

⁸A