

$$a(b+c) = ab + ac \quad \Bigg| \quad a \cdot (bc) \neq (a+b) \cdot (a+c)$$

✓ 1

Verlet' B, C jsou dva doplňky k A . Potom

$$B = B \vee 0 = B \vee (A \wedge C) = (B \vee A) \wedge (B \vee C) = \\ = 1 \wedge (B \vee C) = \underline{B \vee C}$$

$$C = C \vee 0 = C \vee (A \wedge B) = (C \vee A) \wedge (C \vee B) = \\ = 1 \wedge (C \vee B) = \underline{C \vee B}$$

$$\Rightarrow B = C$$

Q2: 3) $A = A \wedge 1 = A \wedge (A \vee A') = (A \wedge A) \vee (A \wedge A') = \\ = (A \wedge A) \vee 0 = A \wedge A$

1) $A \wedge 0 = A \wedge (A \wedge A') = (A \wedge A) \wedge A' = A \wedge A' = 0$

2) $A \wedge (A \vee B) = (A \vee 0) \wedge (A \vee B) = A \vee 0 = A$

formule: $\sum_{i=1}^m \neg z_i$
 2^{2^m}

$$|A \rightarrow B|$$

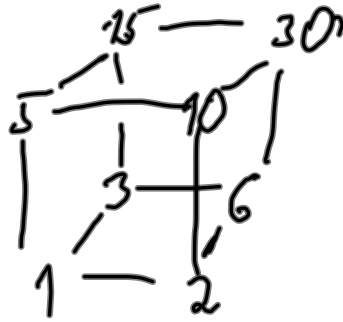
$$|B|^{(A)}$$

A B ...	formule
1 0	0
	⋮
	1

A	B	f
0	1	1
0	0	0
1	1	0
1	0	1

$$f = (\bar{A} \wedge B) \vee (\bar{A} \wedge \bar{B}) \vee (A \wedge \bar{B})$$

$$N_1 \quad n = p_1 \cdot p_2 \cdots p_r$$



$$a \vee b = NSN(a, b)$$

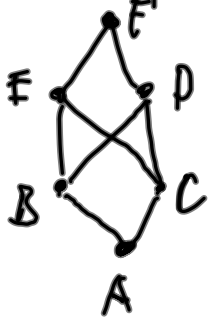
$$a \wedge b = NSD(a, b)$$

Nehtiti $(B, \wedge, \vee, ', 0, 1)$ je booleva algebra.
 Paž relace \leq definovány jako

$$a \leq b := \underline{a = a \wedge b} \quad (\Leftrightarrow b = a \vee b)$$

reflexivita: $a = a \wedge a \quad (\Rightarrow a \leq a)$
 antisymetrie: $a \leq b \ \& \ b \leq a \stackrel{?}{\Rightarrow} a = b \quad \checkmark$
 $\Downarrow \quad \Downarrow$
 $a = a \wedge b \ \& \ b = a \wedge b \Rightarrow a = b$
 tranzitivita: $a \leq b \ \& \ b \leq c \stackrel{?}{\Rightarrow} a \leq c$
 $a = \underline{a} \wedge b \ \& \ b = \underline{b} \wedge c \Rightarrow a = a \wedge (b \wedge c) =$
 $= (a \wedge b) \wedge c = a \wedge c \Rightarrow a \leq c \quad \checkmark$

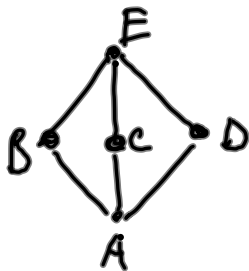
Posed (K, \leq) .



$\inf(E, D)$ neexistuje \Rightarrow není war

$$A \wedge B := \inf(A, B)$$

$$A \vee B := \sup(A, B)$$



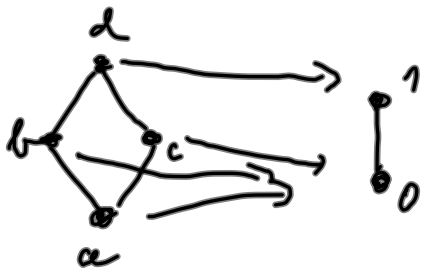
$$B \wedge (C \vee D) = B$$

$$(B \wedge C) \vee (B \wedge D) = A \vee A = A$$

$f: K \rightarrow L$ je izomorfismus $\Leftrightarrow (A \leq B \Rightarrow f(A) \leq f(B))$

$$a \leq_K b \Leftrightarrow a = a \wedge b$$

$$f(a) = f(a \wedge b) = f(a) \wedge f(b) \Rightarrow f(a) \leq_L f(b)$$



izodominí zobrazení,
které není kom. Bool.
algebra

