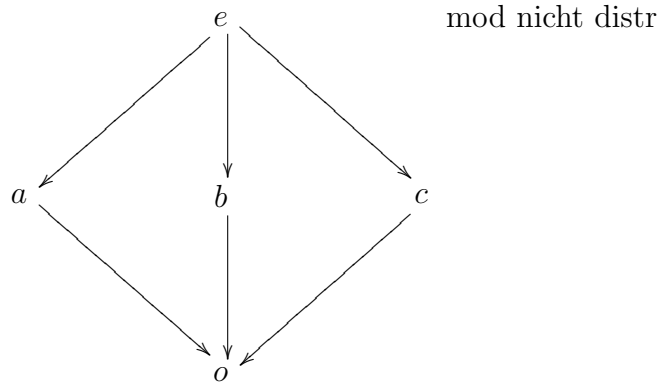


$$\mathbb{L} \text{ modular} \Leftrightarrow \bigwedge_{\mathbb{L} \geq \mathbb{K}} \mathbb{L} \wedge \underbrace{\mathbb{K} \vee \mathbb{K}} = \underbrace{\mathbb{L} \wedge \mathbb{K}} \vee \mathbb{K}$$

$$\mathbb{L} \text{ distr} \Rightarrow \mathbb{L} \text{ modular}$$

$$\mathbb{L} \geq \mathbb{K} \Rightarrow \mathbb{L} \wedge \underbrace{\mathbb{K} \vee \mathbb{K}} \stackrel{\mathbb{L} \geq \mathbb{K}}{=} \underbrace{\mathbb{L} \vee \mathbb{L}} \wedge \underbrace{\mathbb{K} \vee \mathbb{K}} \stackrel{\text{distr}}{=} \underbrace{\mathbb{L} \wedge \mathbb{K}} \vee \mathbb{K}$$



$$\mathbb{L} \text{ modular} \Rightarrow \bar{\mathbb{L}} \text{ modular}$$

$$\mathbb{L} \geq \mathbb{K} \Rightarrow \mathbb{L} \leq \mathbb{K} \Rightarrow \mathbb{L} \bar{\wedge} \underbrace{\bar{\mathbb{K}} \bar{\vee} \bar{\mathbb{K}}} = \mathbb{L} \vee \underbrace{\mathbb{K} \wedge \mathbb{K}} = \underbrace{\mathbb{K} \wedge \mathbb{K}} \vee \mathbb{L} \stackrel{\text{mod}}{=} \mathbb{K} \wedge \underbrace{\mathbb{K} \vee \mathbb{L}} = \mathbb{K} \bar{\vee} \underbrace{\bar{\mathbb{K}} \bar{\wedge} \bar{\mathbb{L}}} = \underbrace{\bar{\mathbb{L}} \bar{\wedge} \bar{\mathbb{K}}} \bar{\vee} \bar{\mathbb{K}}$$

