



\mathbb{B} Boolat

$$\mathfrak{I} \underset{\text{ideal}}{\sqsubset} \mathfrak{J} \Leftrightarrow \begin{cases} 0 \in \mathfrak{J} \\ \forall \alpha \in \mathfrak{J} \exists \beta \Rightarrow \alpha \vee \beta \in \mathfrak{J} \\ \forall \alpha \leq \beta \in \mathfrak{J} \Rightarrow \alpha \in \mathfrak{J} \end{cases}$$

$$e \in \mathfrak{I} \Rightarrow \mathfrak{I} = \mathfrak{J}$$

$$\sim \text{ Kongr-Rel} \Rightarrow \tilde{\mathfrak{I}}^0 = \frac{\forall \alpha \in \mathfrak{I}}{\forall \sim 0} \underset{\text{ideal}}{\sqsubset} \mathfrak{J}$$

$$0 \sim 0 \Rightarrow 0 \in \tilde{\mathfrak{I}}^0$$

$$\forall \alpha \leq \beta \in \tilde{\mathfrak{I}}^0 \Rightarrow \begin{cases} \alpha \sim \alpha \\ \beta \sim 0 \end{cases} \wedge \text{congr} \Rightarrow \alpha = \alpha \wedge \beta \sim \alpha \wedge 0 = 0 \Rightarrow \alpha \in \tilde{\mathfrak{I}}^0$$

$$\forall \alpha \in \tilde{\mathfrak{I}}^0 \exists \beta \Rightarrow \alpha \sim 0 \sim \beta \underset{\vee \text{ congr}}{\Rightarrow} \alpha \vee \beta \sim 0 \vee 0 = 0 \Rightarrow \alpha \vee \beta \in \tilde{\mathfrak{I}}^0$$