

$$\text{Symbole } \begin{cases} O = \mathcal{S}_0 \text{ Konstante} \\ X \text{ Variablen} \\ s_n \text{ Funktionen} \end{cases} \Rightarrow \text{Worte } W$$

$$0\text{-stellig } \underline{W} = O \cup X$$

$$\text{Terme } \overline{O \cup X} \text{ ableitbar}$$

$$s_3 s_2 x s_0 y z \text{ term}$$

$$\bigwedge t \in \overline{O \cup X} \begin{matrix} \text{eind} \\ \text{trg} \end{matrix} \bigvee |t| \subset X \text{ finit } \begin{cases} |x| = (x) \\ |o| = \emptyset \\ |s_n t_1 \dots t_n| = |t_1| \cup \dots \cup |t_n| \end{cases}$$

$$\text{fin subset } Y \in 2_0^X \ni \begin{cases} \tilde{o} = \emptyset \\ \tilde{x} = (x) \\ \tilde{s}_n \underbrace{t_1 | Y_1 \dots t_n | Y_n}_{*} = Y_1 \cup \dots \cup Y_n \end{cases}$$

$$\xrightarrow[\text{Satz}]{\text{Rek}} \bigvee |s_n t_1 \dots t_n| = \tilde{s}_n \underbrace{t_1 : |t_1| \dots t_n : |t_n|}_{*}$$

$$\text{Variablen=Zahlen } f_0 = \underset{\text{null}}{0} : f_1 = \underset{\text{next}}{+1} : f_2 = \underset{\text{add}}{+} : f'_2 = \underset{\text{mult}}{\bullet}$$

$$\text{terme : } \bullet +xyz : \bullet 0x$$

$$\text{Variablen=Mengen } f_0 = \underset{\text{leer}}{\emptyset} : f_2 = \underset{\text{union}}{\cup} : f'_2 = \underset{\text{schnitt}}{\cap}$$

$$\text{terme : } \cap Z \cup XY : \cup \emptyset X$$