

•  
•  
•

4477

*CACBBA*

•  
•

•

•  
•  
•

•

$$\begin{array}{l} W \bullet \\ B \subseteq W \bullet \\ F \backslash \bullet \\ nF \end{array}$$

$$f:W^n \rightarrow W$$

$$\begin{array}{l} X_{B,F} \subseteq W \\ FB \end{array}$$

$$B \subseteq X_{B,F}$$

$$\begin{array}{l} f:W^n \rightarrow W, f \in F \\ f(x_1,x_2,\ldots,x_n) \in X_{B,F}x_1,x_2,\ldots,x_n \in X_{B,F} \end{array}$$

$$\begin{array}{l} X_{B,F} \\ X_{B,F} \\ FB^{}X_{B,F} \end{array}$$

$$\begin{array}{l} a,b^{}W \bullet \\ B=\{ab\} \bullet \\ \bullet \end{array}$$

$$aba$$

$$f_1(w)=waba$$

$$baa$$

$$f_2(w_1aaw_2)=w_1bw_2:aa\notin w_1$$

$$bbb$$

$$f_3(w_1bbbw_2)=w_1w_2:bbb\notin w_1$$

$$\begin{array}{l} \bullet \\ aa,ababa \\ B,F^{}X_{B,F} \end{array}$$

$$yFWF(y),y$$

$$X_1\subseteq X_2\subseteq\cdots\subseteq X_n$$

$$X_1=B$$

$$\ldots$$

$$X_{i+1}=X_i\cup F(X_i)$$

$$\overline{X}=\cup_i X_i$$

$$\overline{X}=X_{B,F}$$

$$X_1=\{ab\}$$

$$X_2=\{ab,ababa\}$$

$$X_3=X_2\cup\{ababa,ababaaba\}$$

$$X_4=X_3\cup\{ababbba,ababaabaaba\}$$

$$\text{etc.}\ldots$$

$$W=\mathbb{N}\,\bullet$$

$$B=\{0\}\,\bullet$$

$$F=\{+2\}\,\bullet$$

$$X_{B,F}=\mathbb{N}_2\,\bullet$$

$$\overline{X}=X_{B,F}\overline{X}\,\bullet$$

$$B\subseteq \overline{X}^{\text{“}}$$

$$X_1\subseteq \overline{X}X_1=B$$

$$\text{“}$$

$$f(x_1,x_2,\ldots,x_n)\in \overline{X}x_1,x_2,\ldots,x_n\in \overline{X}$$

$$x_1,x_2,\ldots,x_n\in X_lX_l$$

$$f(x_1,x_2,\ldots,x_n)\in X_{l+1}$$

$$f(x_1,x_2,\ldots,x_n)\in \overline{X}$$

$$\begin{array}{l} f(a_1,a_2,a_3)\\ a_1\in X_5\; , a_2\in X_{17}\; , a_3\in X_1\\ \Rightarrow\\ f(a_1,a_2,a_3)\in X_{18}\end{array}$$

$$\begin{array}{l} \overline{X}\\ \overline{X}\subseteq YB,F1,2Y\\ \cup X_i\subseteq YX_i\subseteq Yi\end{array}$$

$$X_1=B\subseteq Y\begin{array}{l} \bullet\\ \text{“}\\ Y\end{array}$$

$$X_{i+1}=X_i\cup F(X_i)\subseteq YX_i\subseteq Y\begin{array}{l} \bullet\end{array}$$

$$\begin{array}{l} x_1,x_2,\ldots,x_n\in Yx_1,x_2,\ldots,x_n\in X_i\text{“}\bullet\\ f(x_1,x_2,\ldots,x_n)\in YY\end{array}$$

$$\overline{X}$$

$$\begin{array}{l} \overline{X}=X_{B,F}\\ X_{B,F}\subseteq YB,F1,2Y\end{array}$$

$$\begin{array}{l} \text{“”}\\ X_{B,F}\subseteq Y\end{array}$$

$$B\subseteq Y$$

$$FY$$

$$\begin{array}{l} b\in X_{B,F}\\ a_1,a_2,\ldots,a_nX_{B,F}b\end{array}$$

$$a_n=b$$

$$1\leq i\leq n$$

$$a_i\in B$$

$$F\text{“}a_i$$

$$\begin{array}{l} B=\{0\},\qquad F=\{+2\}\\ \qquad\qquad\qquad 8\in X_{B,F}\\ \{0,2,4,6,8\}\end{array}$$

$$Tx x \notin TX_{B,F} \subseteq TTx \notin X_{B,F}$$

$$T$$

$$aba \notin ABA$$

$$B, Fa^{\text{“}}$$

$$aba$$

$$T \bullet$$

$$\bullet$$

$$B \subseteq T$$

$$f(x_1,x_2,\ldots,x_n)\in Tx_1,x_2,\ldots,x_n\in T$$

$$aab\in T$$

$$aa$$