

$$\begin{aligned}
 X &= \begin{matrix} X_1 \\ \begin{array}{|c|} \hline \text{light blue} \\ \text{blue} \\ \text{dark blue} \\ \hline \end{array} \end{matrix} \times \begin{matrix} X_2 \\ \begin{array}{|c|} \hline \text{light red} \\ \text{red} \\ \hline \end{array} \end{matrix} \times \begin{matrix} X_3 \\ \begin{array}{|c|} \hline \text{light pink} \\ \text{pink} \\ \text{magenta} \\ \hline \end{array} \end{matrix} \\
 \mathcal{P}_{\begin{array}{|c|} \hline \text{light blue} \\ \hline \end{array}} &= \left\{ \mathbb{B}_{\begin{array}{|c|c|} \hline \text{light blue} & \text{light red} \\ \hline \end{array}} \sqsubset = \begin{array}{|c|} \hline \text{light blue} \\ \hline \end{array} \times \begin{array}{|c|} \hline \text{light red} \\ \hline \end{array} \times \begin{array}{|c|} \hline \text{light pink} \\ \text{pink} \\ \text{magenta} \\ \hline \end{array}, \right. \\
 &\quad \left. \mathbb{B}_{\begin{array}{|c|c|} \hline \text{light blue} & \text{red} \\ \hline \end{array}} \sqsubset = \begin{array}{|c|} \hline \text{light blue} \\ \hline \end{array} \times \begin{array}{|c|} \hline \text{red} \\ \hline \end{array} \times \begin{array}{|c|} \hline \text{light pink} \\ \text{pink} \\ \text{magenta} \\ \hline \end{array}, \right. \\
 &\quad \left. \mathbb{B}_{\begin{array}{|c|} \hline \text{light blue} \\ \hline \end{array}} \not\sqsubset = \begin{array}{|c|} \hline \text{blue} \\ \text{light blue} \\ \hline \end{array} \times \begin{array}{|c|} \hline \text{light red} \\ \text{red} \\ \hline \end{array} \times \begin{array}{|c|} \hline \text{light pink} \\ \text{pink} \\ \text{magenta} \\ \hline \end{array} \right\}
 \end{aligned}$$