

$$\begin{array}{ccc}
\mathcal{P}(A) \times \{\bullet\} & \xrightarrow{\rho} & \mathcal{P}(A) \\
1 \times \varepsilon \downarrow & & \uparrow \mathcal{P}(\rho) \\
\mathcal{P}(A) \times \mathcal{P}(\{\bullet\}) & \xrightarrow{\varphi} & \mathcal{P}(A \times \{\bullet\})
\end{array}
\qquad
\begin{array}{ccc}
\{\bullet\} \times \mathcal{P}(A) & \xrightarrow{\lambda} & \mathcal{P}(A) \\
\varepsilon \times 1 \downarrow & & \uparrow \mathcal{P}(\lambda) \\
\mathcal{P}(\{\bullet\}) \times \mathcal{P}(A) & \xrightarrow{\varphi} & \mathcal{P}(\{\bullet\} \times A)
\end{array}$$