

$$\begin{array}{ccc}
 1 & & \\
 \delta_1 \downarrow & \searrow a & \\
 1 \times 1 & & A \\
 x \times a \downarrow & & \searrow g \\
 X \times A & \xrightarrow{\quad} & B \\
 & \tilde{f} &
 \end{array}$$

$$\begin{array}{ccc}
 X \times A & & \\
 f \times \text{id}_A \downarrow & & \searrow \tilde{f} \\
 B^A \times A & \xrightarrow{\quad} & B \\
 & \epsilon &
 \end{array}$$