

$$\begin{array}{ccc}
 & x & \\
 \swarrow & \uparrow \scriptstyle{iso} & \searrow \\
 a & a \times b & b \\
 \longleftarrow & & \longrightarrow
 \end{array}$$

$$\begin{array}{ccc}
 & a & \\
 \swarrow \scriptstyle{id_a} & \uparrow \scriptstyle{iso} & \searrow \scriptstyle{!_a} \\
 a & a \times 1 & 1 \\
 \longleftarrow & & \longrightarrow
 \end{array}$$

$$\begin{array}{ccc}
 \varepsilon_{\mathbf{B}}(Id_F, -) & & \\
 \mathbf{A} & \xrightarrow{\quad} & \mathbf{B} \\
 a & & Fa \\
 \downarrow \scriptstyle{f} & & \downarrow \scriptstyle{Ff} \\
 b & & Fb
 \end{array}$$