

$$\mathcal{C}(X_1, Y_1)$$

$$\mathcal{C}(f, g)$$

$$\xrightarrow{\mathcal{C}(-,-)}$$

$$\begin{matrix} Y_1 \\ \downarrow g \\ Y_2 \end{matrix}$$

$$\begin{matrix} X_1 \\ f\uparrow \\ X_2 \end{matrix}$$

$$\mathcal{C}(X_2, Y_2)$$