

$$\begin{array}{ccccccc}
A : \cdots & \longrightarrow & X_{n+1} & \xrightarrow{d_{n+1}^{\mathbf{X}\bullet}} & X_n & \xrightarrow{d_n^{\mathbf{X}\bullet}} & X_{n-1} \longrightarrow \cdots \\
f \downarrow & & f_{n+1} \downarrow & & f_n \downarrow & & f_{n-1} \downarrow \\
B : \cdots & \longrightarrow & Y_{n+1} & \xrightarrow{d_{n+1}^{\mathbf{Y}\bullet}} & Y_n & \xrightarrow{d_n^{\mathbf{Y}\bullet}} & Y_{n-1} \longrightarrow \cdots
\end{array}$$