

$$\begin{array}{ccccccc}
 X & \xrightarrow[\textcolor{blue}{i}]{\text{TCofib}} & Y & \longrightarrow & S & \longrightarrow & \\
 \parallel & & \textcolor{blue}{\downarrow} \text{Cofib} & & \textcolor{black}{\downarrow} & & \\
 \textcolor{red}{X} & \xrightarrow{\textcolor{red}{\phantom{i}}} & V_Y & \xrightarrow{\textcolor{red}{\phantom{i}}} & E & \xrightarrow{\textcolor{red}{\delta_X}} & \\
 & & \textcolor{blue}{\downarrow} & & \textcolor{black}{\downarrow} \lambda & & \\
 & & U_Y & \textcolor{blue}{=} & U_Y & & \\
 & & \textcolor{blue}{\downarrow} \delta_Y & & \textcolor{black}{\downarrow} & & 
 \end{array}$$

$$\begin{array}{ccccccc}
 \textcolor{red}{X} & \xrightarrow{\textcolor{red}{\phantom{i}}} & V_Y & \xrightarrow{\textcolor{red}{\phantom{i}}} & E & \xrightarrow{\textcolor{red}{\delta_X}} & \\
 \downarrow i & & \parallel 1_{V_Y} & & \downarrow \lambda & & \\
 Y & \xrightarrow{\textcolor{blue}{\phantom{i}}} & V_Y & \xrightarrow{\textcolor{blue}{\phantom{i}}} & U_Y & \xrightarrow{\textcolor{blue}{\delta_Y}} & 
 \end{array}$$