

$$\begin{array}{ccccccc}
 A_1 & \xrightarrow{\quad f_A \quad} & A_2 & \xrightarrow{\quad g_A \quad} \twoheadrightarrow & A_3 & \xrightarrow{\quad \delta_A \quad} & \\
 \parallel & & \downarrow i_2 & & \downarrow y & & \\
 A_1 & \xrightarrow{\quad i_2 f_A \quad} & B_2 & \dashrightarrow \twoheadrightarrow & E & \dashrightarrow & \\
 & & \downarrow p_2 & & \downarrow z & & \\
 & & C_2 & \equiv & C_2 & & \\
 & & \downarrow \varepsilon_2 & & \downarrow (g_A)_* \varepsilon_2 & & 
 \end{array}$$