$$A_{1} \xrightarrow{f_{A}} A_{2} \xrightarrow{g_{A}} A_{3} \xrightarrow{\delta_{r1}}$$

$$\downarrow \downarrow m_{2} \qquad x \downarrow \qquad \downarrow$$

$$A_{1} \xrightarrow{m_{2}f_{A}} B_{2} \xrightarrow{y} E \xrightarrow{\eta}$$

$$\downarrow n_{2} \qquad z \downarrow \qquad \downarrow$$

$$C_{2} = = C_{2}$$

$$\downarrow \delta_{c2} \qquad \varepsilon \downarrow$$