

$$\begin{array}{ccccccc}
 \bullet & \xrightarrow{f} & \bullet & \twoheadrightarrow & \text{cok } f & \xrightarrow{\delta_f} & \\
 \parallel & & \downarrow g & & \downarrow & & \\
 \bullet & \xrightarrow{g \circ f} & \bullet & \twoheadrightarrow & \text{cok } g \circ f & \xrightarrow{\delta_{g \circ f}} & \\
 & & \downarrow & & \downarrow & & \\
 & & \text{cok } g & \xlongequal{\quad} & \text{cok } g & & \\
 & & \downarrow \delta_g & & \downarrow \delta_c & &
 \end{array}$$