

$$\begin{array}{ccccccc}
adX' & \xrightarrow{f} & Y' & \longrightarrow & Z' & \longrightarrow & X'[1] \\
\downarrow & & \downarrow & & \downarrow & & \downarrow \\
X & \longrightarrow & Y & \longrightarrow & Z & \longrightarrow & X[1] \\
\downarrow & & \downarrow & & \downarrow & & \downarrow \\
X' & \longrightarrow & Y' & \longrightarrow & Z' & \longrightarrow & X'[1]
\end{array}$$

Curved arrows labeled 1 indicate isomorphisms: $adX' \xrightarrow{1} X'$, $Y' \xrightarrow{1} Y'$, $Z' \xrightarrow{1} Z'$, and $X'[1] \xrightarrow{1} X'[1]$.