

$$\begin{array}{ccccccc}
 & & c_1 & & c_2 & & \\
 & & R & \xlongequal{\quad} & R & & \\
 & & \downarrow x & & \downarrow & & \\
 r_2 & W[-1] & \xrightarrow{-w[-1]} & X & \xrightarrow{u} & Y & \xrightarrow{v} & W \\
 & \parallel & & \downarrow y & & \downarrow & & \parallel \\
 r_3 & W[-1] & \longrightarrow & S & \longrightarrow & Z & \xlongequal{\quad} & W \\
 & & & \downarrow z & & \downarrow & & \downarrow w \\
 & & & R[1] & \xlongequal{\quad} & R[1] & \xrightarrow{x[1]} & X[1]
 \end{array}$$