$$\xi \stackrel{\psi}{=} 1 \xrightarrow{\times a_r} \xi a_r \stackrel{\psi}{=} a_r \xrightarrow{+ ta_{1} + a_{2}} \xi a_{r} + ta_{1} + a_{2} \stackrel{\psi}{=} a_{r} + ta_{1} + ta_{2} \stackrel{\psi}{=} a_{r} + ta_{1} + ta_{2} \stackrel{\psi}{=} a_{r} + ta_{2} \stackrel{\psi}$$

