

\vdots	\vdots	\vdots	\cdots	\vdots	\cdots
$R = S$	$GL(1, S)$	$GL(2, S)$	\cdots	$GL(k, S)$	\cdots
\vdots	\vdots	\vdots	\cdots	\vdots	\cdots
$R = \mathbb{Z}$	$GL(1, \mathbb{Z})$	$GL(2, \mathbb{Z})$	\cdots	$GL(k, \mathbb{Z})$	\cdots
	$n = 1$	$n = 2$	\cdots	$n = k$	\cdots