first in set	last in set	count	root of first in set	root length
1	$2k+1$	$2k+1$	$a^{k-1}baa^{k-1}ba^{k-1}ba$	$3k+2$
$2k+2$	$3k+2$	$k+1$	NONE	0
$3k+3$	$4k+1$	$k-1$	$a^{k-1}ba$	$k+1$
$4k+2$	$4k+2$	1	$baa^{k-1}ba^{k-1}$	$2k+1$
$4k+3$	$4k+3$	1	NONE	0
$4k+4$	$5k+3$	k	$a^{k-1}b$	k
$5k+4$	$6k+3$	k	$a^{k-1}ba^kbaa$	$2k+3$