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	$a^{k-1}ba$	$\begin{vmatrix} k+1\\2k+1 \end{vmatrix}$
4k + 2	4k + 2	1	$baa^{k-1}ba^{k-1}$	2k + 1
4k + 3	4k + 3	1	$a^{k-1}ba$ $baa^{k-1}ba^{k-1}$ NONE	0
4k + 4	5k + 3	k	$\begin{vmatrix} a^{k-1}b \\ a^{k-1}ba^kbaa \end{vmatrix}$	k
5k + 4	6k + 3	k	$a^{k-1}ba^kbaa$	2k + 3