

fragment	suitable pairs to reconstruct
$p(1)$	$(p(w^7), p(w^9)); (p(w^{11}), p(w^{12}))$
$p(w)$	$(p(w^7), p(w^{14})); (p(w^8), p(w^{10}))$
$p(w^2)$	$(p(w^7), p(w^{12})); (p(w^9), p(w^{11})); (p(w^{12}), p(w^{10}))$
$p(w^3)$	$(p(w^8), p(w^{13})); (p(w^{10}), p(w^{12}))$
$p(w^4)$	$(p(w^9), p(w^{14})); (p(w^{11}), p(w^{13}))$
$p(w^5)$	$(p(w^7), p(w^{13})); (p(w^{12}), p(w^{14}))$
$p(w^6)$	$(p(w^7), p(w^{10})); (p(w^8), p(w^{14}))$