$-\boxed{C_0}- = $—

$-\boxed{C_1}- = -\boxed{H}-\boxed{S}-\boxed{H}-\boxed{H}-\boxed{S}-\boxed{S}-\boxed{H}-$

$-\boxed{C_2}- = -\boxed{H}-\boxed{S}-\boxed{S}-\boxed{H}-\boxed{H}-\boxed{S}-\boxed{H}-$

R5 : $-\boxed{X}- = -\boxed{H}-\boxed{S}-\boxed{H}-\boxed{H}-\boxed{S}-\boxed{S}-\boxed{H}-$ =: $-\boxed{C_1}-$

R7: $-\boxed{X^2}- = -\boxed{H}-\boxed{S}-\boxed{S}-\boxed{H}-\boxed{H}-\boxed{S}-\boxed{H}-$ =: $-\boxed{C_2}-$

R9: $X^3 = I$

Lem 7 By definition, R5, R7 & R9, we have 17. $-\boxed{X}-\boxed{C_c}-$

(1) $-\boxed{X}-\boxed{C_0}- = -\boxed{C_1}-$

(2) $-\boxed{X}-\boxed{C_1}- = -\boxed{C_2}-$

(3) $-\boxed{X}-\boxed{C_2}- = -\boxed{C_0}-$

Proof: 17.(1). LHS := $-\boxed{X}-$ $\overset{R5}{=:}$ $-\boxed{C_1}-$ = 17.(1). RHS

17.(2). LHS := $-\boxed{X}-\boxed{H}-\boxed{S}-\boxed{H}-\boxed{H}-\boxed{S}-\boxed{S}-\boxed{H}-$

$\overset{R5}{=} -\boxed{X}-\boxed{X}- \overset{R7}{=:} -\boxed{C_2}-$ = 17.(2). RHS

17.(3). LHS := $-\boxed{X}-\boxed{H}-\boxed{S}-\boxed{S}-\boxed{H}-\boxed{H}-\boxed{S}-\boxed{H}-$

$\overset{R7}{=} -\boxed{X}-\boxed{X}-\boxed{X}- \overset{R9}{=}$ —— =: $-\boxed{C_0}-$ = 17.(3). RHS

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