$$\left.\begin{aligned} -\boxed{E_0}- &= ——— \\ -\boxed{E_1}- &= -\boxed{S}- \\ -\boxed{E_2}- &= -\boxed{S}-\boxed{S}- \end{aligned}\right\} \quad -\boxed{E_h}- = -\boxed{S^h}- \quad h \in \mathbb{Z}_3$$

C_3 : $S^3 = I$

R_3 : $SZ = ZS$

Lem 8 By definition & C_3, we have 24 (1) $-\boxed{S}-\boxed{E_0}- = -\boxed{E_1}-$

(2) $-\boxed{S}-\boxed{E_1}- = -\boxed{E_2}-$

(3) $-\boxed{S}-\boxed{E_2}- = -\boxed{E_0}-$

Proof : 24. (1)/(2)/(3). LHS $= -\boxed{S}-\boxed{E_h}- := -\boxed{S}-\boxed{S^h}-$

$= -\boxed{S^{h+1}}- =: -\boxed{E_{h+1}}- =$ RHS.

Note that 24. (3). LHS $:= -\boxed{S}-\boxed{S}-\boxed{S}- \overset{C_3}{=} ——— =: -\boxed{E_0}- =$ 24. (3). RHS.

$\boxed{/\!/}$

Lem 9 By definition & R_3, we have 25. (1) $-\boxed{Z}-\boxed{E_0}- = -\boxed{E_0}-\boxed{Z}-$

(2) $-\boxed{Z}-\boxed{E_1}- = -\boxed{E_1}-\boxed{Z}-$

(3) $-\boxed{Z}-\boxed{E_2}- = -\boxed{E_2}-\boxed{Z}-$

Proof : 25. (1)/(2)/(3). LHS $= -\boxed{Z}-\boxed{E_h}- := -\boxed{Z}-\boxed{S^h}- \overset{R_3}{=} -\boxed{S^h}-\boxed{Z}-$

$=: -\boxed{E_h}-\boxed{Z}- =$ RHS.

$\boxed{/\!/}$