

Hello. Write **DNE** if the object does not exist or the operation cannot be performed. NB: **DNE** \neq $\{\}$ \neq $0 \neq$ *Empty-word*..

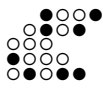
Let F and R be the **flip** and **rotation** in the dihedral group \mathbb{D}_N , with $F^2=e$, $R^N=e$ and $RFRF=e$. Use R^j and R^jF as the standard form of each element in \mathbb{D}_N .

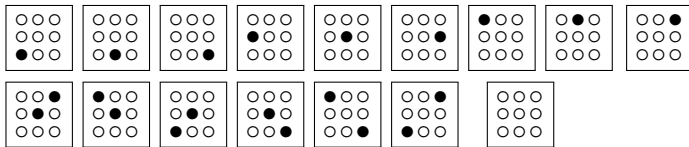
The following is shorter than the actual Class-D.

D4: Show no work.

a The of our textbook is: Archimedes Cantor DNE Euler Fermat Gallian Gauss Klein Lagrange Machen.
And its title is: _____

b Let $G := U(32)$ and $H := \{1, 31\}$. Then G/H is to: \mathbb{Z}_8 $\mathbb{Z}_4 \times \mathbb{Z}_2$ \mathbb{D}_4 $\mathbb{Z}_2 \times \mathbb{Z}_2 \times \mathbb{Z}_2$.

c This peg configuration  is Klein-equivalent to which in its 3x3 subsquare?:



End of Prac-D

D-Home: _____ 275pts

D4: _____ 135pts

Total: _____ 410pts

HONOR CODE: "I have neither requested nor received help on this exam other than from my professor (or his colleague)."
Name/Signature/Ord

Ord: _____