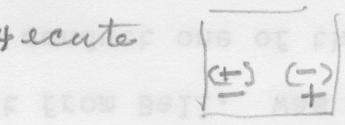
3. Orient the Corners Pg35

Use $(F U-)^3 (F^- U)^3$ to

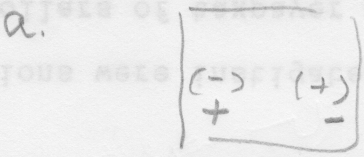
execute



− = CCW rotation
+ = CW rotation
( ) status of element
− or + rotation executed

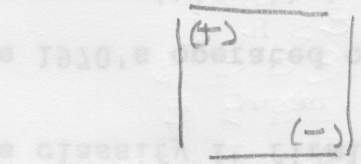
Other situations:

a.



=

Use $(F U-)^3 (F-U)^3 (F U-)^3 (F-U)^3$



$^1U-$ $(F U-)^3 (F-U)^3$ $(F U-)^3 (F-U)^3$

U $(F U-)^3 (F-U)^3$

4. Align the Edges (keeping corners fixed) Pg54

$(U\ R_m)U_2(R_m\ R\ U)$

$R_m = 2R, 2L-$

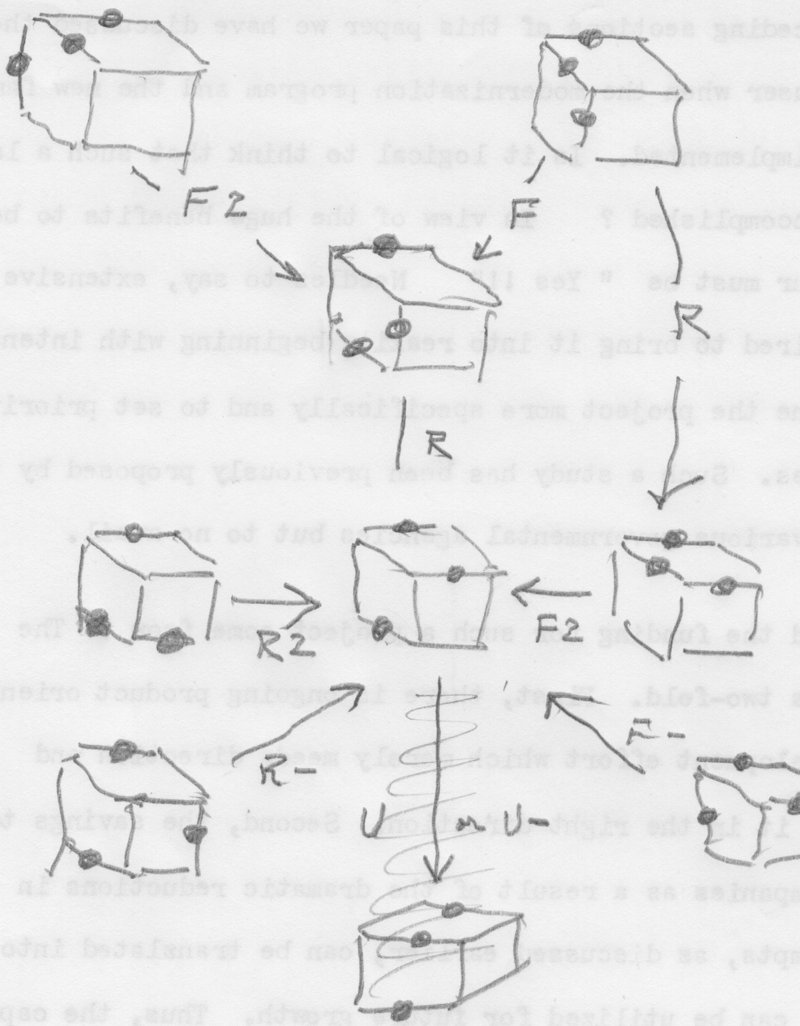
$R_{\bar{m}} = 2R^- 2L$

or

$U^- R_m U_2 R_{\bar{m}} U-$

4. (cont.)

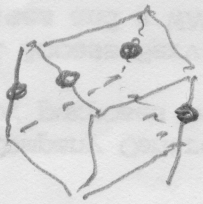
To get edges into a V alignment pg 55



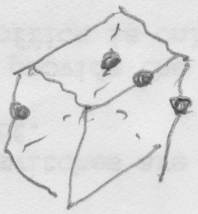
~~Take on~~
after (F³ R...)(F² ...) the V swap the cube must be returned to correct edge alignment.

It appears that ~~is the~~ the target slot ~~one~~ should ~~be the~~ b slot (prev. page) and with a V move put a into it or with a V- move put c into it.

5. Flipping the Two Top edges at the main corners

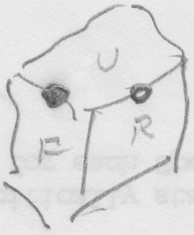


$(FU_m^-)^4$



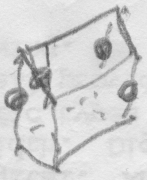
$(R^- U_m)^4$

$U_m = 2U\ 2D^-$
$U_m^-\ 2U^-\ 2D$

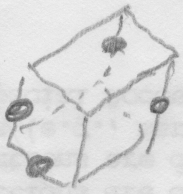


Together

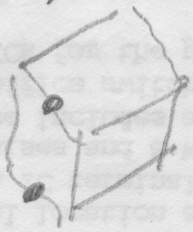
Flipping Two Opposite Edges on the Front Face.



$(F\ U_m^-)^4$

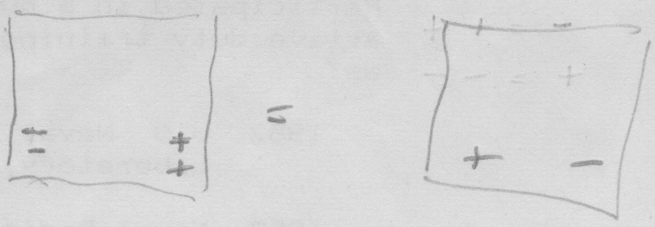


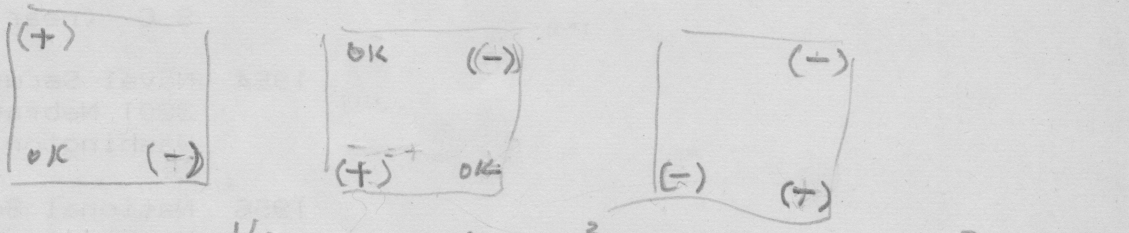
$(F^-\ U_m^-)^4$



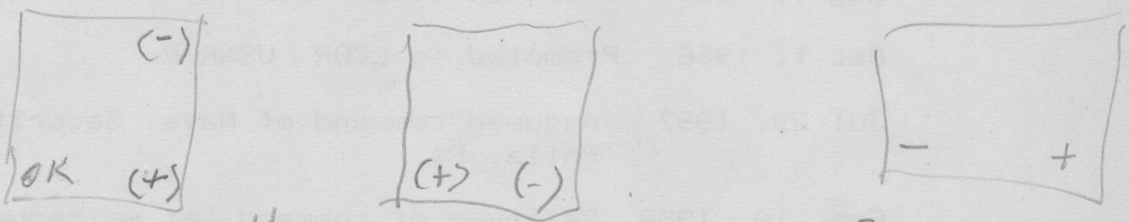
Problem — To Rotate Entire Cube

+, 1/4 Turn CW + + = −
− − = +

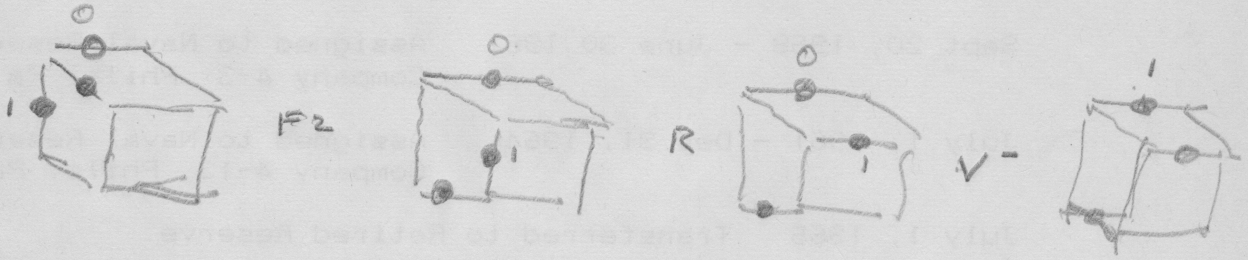




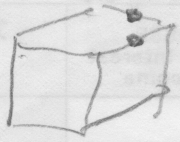
U- (FU-)³(F-U)³ (FU-)³(F-U)³



U (FU-)³(F=U)³

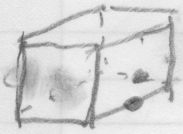


Examples of Using Transformation Tables — with Edge Swaps



Transformation - T1 or $U(FU_m^-)^4$ OK

Use $(RU_m^-)^4\ (B^-U_m)^4$ $(R^-U_m)^4\ U^-$



Transformations T4, T4 or R^-B2U2

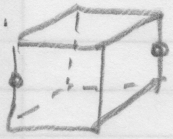
$(BL_m^-)^4(R^-L_m)^4$ $(FU_m^-)^4$

$(R^-U_m)^4$

$L_m^- = 2D^-2U$ $U2B2R$

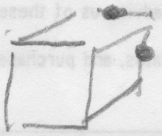
$L_m^+ = 2D2U^-$

X ?



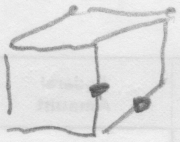
$R = F\ (FU_m^-)^4(R^-U_m)^4 \cdot F^-\ R2$ OK

or $R2F = (FU_m^-)^4(F-U_m^-)^4F-R2$



Transformation T4

$(U, 2B-, 2F)^4\ (R-2B, 2F-)^4$ OK



T7

$(F, 2R-2L)^4\ (D-, 2R, 2L-)^4$

T4 T1

$(R\ 2B-, 2F)^4\ (D-2B\ 2F-)^4$ OK

TRANSFORMATION TABLES

	F	2F	L	2L	B	2B	R	2R	D	2D	U	2U
T1 1/4T CW	R	2R	F	2F	L	2L	B	2B	D	2D	U	2U
T2 1/2T	B	2B	R	2R	F	2F	L	2L	D	2D	U	2U
T3 1/4T CCW	L	2L	B	2B	R	2R	F	2F	D	2D	U	2U

	F	2F	L	2L	B	2B	R	2R	D	2D	U	2U
T4 1/4T CW	U		L		D		R		F		B	
T5 1/2T	B		L		F		R		U		D	
T6 1/4T CW	D		L		U		R		B		F	

	F	2F	L	2L	B	2B	R	2R	D	2D	U	2U
T7 1/4T CW	F		U		B		D		L		R	
T8 1/2T	F		R		B		L		U		D	
T9 1/4T CCW	F		D		B		U		R		L	

Apply Tables in reverse order

i.e T4 T1 read into T1 Table 1st then T4