



NB! The  $2(A180A)$ -move  
(please see separate sheet)  
will turn the left  
and bottom pyramids  
 $180^\circ$  and leave everything  
else unchanged

L and R-move

The only difference between them  
is here

» G-move »  $\Rightarrow L = 180^\circ$  vertical axis  $\Rightarrow 3B + 3C$

R = tip away  $90^\circ$  lateral axis  $\Rightarrow 2(A-180-A)$

↑  
vertical axis

### Function of L and R moves

memory aid =

» The left move moves the left  
The right move moves the right » Please see next page!  
Follow-up memory aid to  
set up  $L_2$  and  $R_2$  =  $\Rightarrow \Rightarrow$

After cube  $180^\circ$  vertical axis,  
tip the cube L/R  $90^\circ$  along the  
longitudinal axis:-

» tip  $90^\circ$  L for  $L_2$   
tip  $90^\circ$  R for  $R_2$  »

These perform L and R respectively

### Possible states of the WTX (SSX) once the WT (SS) position is solved

If the outer "slopes" of the 3 "valleys" surrounding  
a (cube/skewb) corner are all the same colour - in  
which case the same must be true of the diametrically  
opposed corner - then that "interval axis" is correct.  
If this is the only axis that is correct then the WTX  
is in "state 1".

The only other alternatives are "state 4" = all four interval  
axes are connect = the WTX is rotated on "state 0" = no  
interval axes are connect; there is obviously no such thing  
as "3 axes connect" (= "axis wrong" ... ??), or even 2 axes  
connect, in this case.

If the WTX is in "state 1", place one of the corners  
of the correct axis in the upper right position and then  
apply L or  $L_2$  to solve (in one move), cause the upper left  
position and then apply R or  $R_2$ ; the choice between L and  
 $L_2$  and between R and  $R_2$  depends upon which end of the  
axis you have in the upper right/left

To run through the 12 solutions  
in the most orderly possible way, start  
with any solution and then perform

$LLRRLLRLR_2L_2R_2$   
OR

$RRLLRRLRL_2R_2L_2$

As you can see, in both cases there  
are 11 transitions, which is the fewest  
possible

$\Rightarrow \Rightarrow$  = the "left and right move" change the left and right faces  
of the octahedron "surrounding" the ULF and URF reference  
corners of the skewb/cube  
(from previous page)

To the left below we have the results of an actual run through  
the 12 solutions of the WT-position of a WTX (with R, B, G and  
Y-coloured faces on the octahedron), starting arbitrarily from  
Y-B on the top left-top-right face; on the right we have a  
discussion on how to solve the WTX from a "0-state"

Solutions	State	The 1:3:8 proportion of states will be the same for any WTX (or SSX)
YB	1	To solve from an "0-state", simply apply L or R from any direction; this will always lead to a "1-state"!
+L $\Rightarrow$ GB	1	The reason this works is because none of the "0-states" on the "4-state" can be transformed into any of the others. In less than two L and/or R moves, so if one applies a single L or R move, from no matter what direction, the cube will "necessarily" go back into a "1-state".
+L $\Rightarrow$ RB	0	* Since the "0-state" and the "4-state" are all interrelated through $180^\circ$ moves around the vertical, longitudinal and lateral axes
+R $\Rightarrow$ RY	1	
+R $\Rightarrow$ RG	1	
+L $\Rightarrow$ BG	1	
+L $\Rightarrow$ YG	0	
+R $\Rightarrow$ YR	1	
+L $\Rightarrow$ BR	0	
+R_2 $\Rightarrow$ BY	1	
+L_2 $\Rightarrow$ GY	4	
+R_2 $\Rightarrow$ GR	1	