

Triangle Symmetries Multiplication Table.

$$\begin{array}{l}
 I: \begin{array}{ccc} & 1 & \\ 3 & & 2 \end{array} \rightarrow \begin{array}{ccc} & 1 & \\ 3 & & 2 \end{array} \quad R: \begin{array}{ccc} & 1 & \\ 3 & & 2 \end{array} \rightarrow \begin{array}{ccc} & 3 & \\ 2 & & 1 \end{array} \\
 R^2: \begin{array}{ccc} & 1 & \\ 3 & & 2 \end{array} \rightarrow \begin{array}{ccc} & 2 & \\ 1 & & 3 \end{array} \quad V: \begin{array}{ccc} & 1 & \\ 3 & & 2 \end{array} \rightarrow \begin{array}{ccc} & 1 & \\ 2 & & 3 \end{array} \\
 U: \begin{array}{ccc} & 1 & \\ 3 & & 2 \end{array} \rightarrow \begin{array}{ccc} & 2 & \\ 3 & & 1 \end{array} \quad L: \begin{array}{ccc} & 1 & \\ 3 & & 2 \end{array} \rightarrow \begin{array}{ccc} & 3 & \\ 1 & & 2 \end{array}
 \end{array}$$

	I	R	R^2	V	U	L
I	I	R	R^2	V	U	L
R	R	R^2	I	L	V	U
R^2	R^2	I	R	U	L	V
V	V	U	L	I	R	R^2
U	U	L	V	R^2	I	R
L	L	V	U	R	R^2	I

S_3 Multiplication Table.

	e	(132)	(123)	(23)	(12)	(13)
e	e	(132)	(123)	(23)	(12)	(13)
(132)	(132)	(123)	e	(13)	(23)	(12)
(123)	(123)	e	(132)	(12)	(13)	(23)
(23)	(23)	(12)	(13)	e	(132)	(123)
(12)	(12)	(13)	(23)	(123)	e	(132)
(13)	(13)	(23)	(12)	(132)	(123)	e