

Eine diskrete Menge geometrischer Objekte (d.h. Punktmengen) wird regulär genannt, wenn jedes Objekt in jedes andere durch eine kongruente Abbildung so überführt werden kann, daß dabei die ganze Menge mit sich zur Deckung kommt.

Laszlo Fejes Tóth, *Reguläre Figuren*, Budapest 1965. Vorwort, p.7.

$\begin{array}{c} 2 \\ 3 \end{array} \boxed{1_6} \begin{array}{c} 4 \\ 4 \end{array}$		(142)(356)	$\begin{array}{c} 1 \\ 5 \end{array} \boxed{4_3} \begin{array}{c} 2 \\ 2 \end{array}$
$\begin{array}{c} 5 \\ 5 \\ 3 \end{array} \boxed{1_6} \begin{array}{c} 2 \\ 2 \end{array}$	(2354)	(1463)	$\begin{array}{c} 6 \\ 1 \\ 2 \end{array} \boxed{4_3} \begin{array}{c} 6 \\ 6 \end{array}$
$\begin{array}{c} 4 \\ 2 \\ 4 \end{array} \boxed{1_6} \begin{array}{c} 5 \\ 5 \end{array}$	(2453)	(14)(25)(36)	$\begin{array}{c} 5 \\ 6 \\ 5 \end{array} \boxed{4_3} \begin{array}{c} 1 \\ 1 \end{array}$
$\begin{array}{c} 3 \\ 4 \\ 5 \end{array} \boxed{1_6} \begin{array}{c} 3 \\ 3 \end{array}$	(25)(34)	(145)(326)	$\begin{array}{c} 2 \\ 2 \\ 6 \end{array} \boxed{4_3} \begin{array}{c} 5 \\ 5 \end{array}$
$\begin{array}{c} 2 \\ 4 \\ 1 \end{array} \boxed{2_5} \begin{array}{c} 3 \\ 3 \end{array}$	(12)(34)(56)	(1562)	$\begin{array}{c} 1 \\ 3 \\ 1 \end{array} \boxed{5_2} \begin{array}{c} 4 \\ 4 \end{array}$
$\begin{array}{c} 6 \\ 1 \\ 3 \end{array} \boxed{2_5} \begin{array}{c} 6 \\ 6 \end{array}$	(123)(465)	(154)(362)	$\begin{array}{c} 6 \\ 6 \\ 3 \end{array} \boxed{5_2} \begin{array}{c} 1 \\ 1 \end{array}$
$\begin{array}{c} 4 \\ 6 \\ 4 \end{array} \boxed{2_5} \begin{array}{c} 1 \\ 1 \end{array}$	(124)(365)	(153)(246)	$\begin{array}{c} 4 \\ 1 \\ 4 \end{array} \boxed{5_2} \begin{array}{c} 6 \\ 6 \end{array}$
$\begin{array}{c} 3 \\ 3 \\ 6 \end{array} \boxed{2_5} \begin{array}{c} 4 \\ 4 \end{array}$	(1265)	(15)(26)(34)	$\begin{array}{c} 4 \\ 4 \\ 6 \end{array} \boxed{5_2} \begin{array}{c} 3 \\ 3 \end{array}$
$\begin{array}{c} 1 \\ 2 \\ 1 \end{array} \boxed{3_4} \begin{array}{c} 5 \\ 5 \end{array}$	(132)(456)	(16)(34)	$\begin{array}{c} 1 \\ 4 \\ 2 \end{array} \boxed{6_1} \begin{array}{c} 3 \\ 3 \end{array}$
$\begin{array}{c} 6 \\ 6 \\ 2 \end{array} \boxed{3_4} \begin{array}{c} 1 \\ 1 \end{array}$	(1364)	(16)(23)(45)	$\begin{array}{c} 5 \\ 2 \\ 3 \end{array} \boxed{6_1} \begin{array}{c} 5 \\ 5 \end{array}$
$\begin{array}{c} 5 \\ 1 \\ 5 \end{array} \boxed{3_4} \begin{array}{c} 6 \\ 6 \end{array}$	(13)(25)(46)	(16)(24)(35)	$\begin{array}{c} 4 \\ 5 \\ 4 \end{array} \boxed{6_1} \begin{array}{c} 2 \\ 2 \end{array}$
$\begin{array}{c} 2 \\ 5 \\ 6 \\ 1 \end{array} \boxed{3_4} \begin{array}{c} 2 \\ 2 \end{array}$	(135)(264)	(16)(25)	$\begin{array}{c} 3 \\ 3 \\ 5 \\ 2 \end{array} \boxed{6_1} \begin{array}{c} 4 \\ 4 \end{array}$

(Positionen lexikographisch geordnet)

$\frac{2}{3}$	$\boxed{1_6}$	4	[1][2][3][4][5][6]	Identität			
<i>sechs 2-zählige Achsen</i>							
$\frac{3}{2}$	$\boxed{6_1}$	5	(16)(23)(45)	(16)(24)(35)	$\frac{4}{5}$	$\boxed{6_1}$	2
$\frac{4}{5}$	$\boxed{3_4}$	6	(13)(25)(46)	(14)(25)(36)	$\frac{3}{6}$	$\boxed{4_3}$	1
$\frac{2}{4}$	$\boxed{2_5}$	3	(12)(34)(56)	(15)(26)(34)	$\frac{2}{4}$	$\boxed{5_2}$	3
<i>vier 3-zählige Achsen</i>							
$\frac{3}{1}$	$\boxed{2_5}$	6	(123)(465)	(132)(456)	$\frac{1}{2}$	$\boxed{3_4}$	5
$\frac{4}{5}$	$\boxed{4_3}$	2	(142)(356)	(124)(365)	$\frac{6}{4}$	$\boxed{2_5}$	1
$\frac{6}{3}$	$\boxed{5_2}$	1	(154)(362)	(145)(326)	$\frac{3}{6}$	$\boxed{4_3}$	5
$\frac{4}{5}$	$\boxed{3_4}$	2	(135)(264)	(153)(246)	$\frac{1}{4}$	$\boxed{5_2}$	6
<i>drei 4-zählige Achsen</i>							
$\frac{3}{5}$	$\boxed{1_6}$	2	[1](2354)[6]	[1](25)(34)[6]	$\frac{5}{4}$	$\boxed{1_6}$	3
$\frac{4}{2}$	$\boxed{1_6}$	5	[1](2453)[6]		$\frac{4}{2}$		
$\frac{3}{1}$	$\boxed{4_3}$	6	(1463)[2][5]	(16)[2](34)[5]	$\frac{2}{4}$	$\boxed{6_1}$	3
$\frac{5}{2}$	$\boxed{3_4}$	1	(1364)[2][5]		$\frac{5}{2}$		
$\frac{5}{3}$	$\boxed{2_5}$	4	(1265)[3][4]	(16)(25)[3][4]	$\frac{5}{3}$	$\boxed{6_1}$	4
$\frac{1}{3}$	$\boxed{5_2}$	4	(1562)[3][4]		$\frac{1}{2}$		

A striking example of the development of a Platonic vision is the mathematical analysis of symmetry which has led to the theory of groups.

F.E. Browder and S. MacLane

Untergruppe H derjenigen Drehungen des Würfels, die eine Hauptdiagonale (von links oben nach rechts unten)

in sich überführen.

$\begin{array}{c} 2 \\ 3 \end{array} \begin{array}{ c } \hline 1_6 \\ \hline \end{array} \begin{array}{c} 4 \\ 5 \\ 3 \end{array}$	$[1][2][3][4][5][6]$	$(16)(24)(35)$	$\begin{array}{c} 4 \\ 5 \end{array} \begin{array}{ c } \hline 6_1 \\ \hline \end{array} \begin{array}{c} 2 \\ 3 \\ 6 \end{array}$
$\begin{array}{c} 5 \\ 1 \end{array} \begin{array}{ c } \hline 2_5 \\ \hline \end{array} \begin{array}{c} 6 \\ 4 \\ 1 \end{array}$	$(123)(465)$	$(15)(26)(34)$	$\begin{array}{c} 3 \\ 4 \end{array} \begin{array}{ c } \hline 5_2 \\ \hline \end{array} \begin{array}{c} 3 \\ 1 \\ 5 \end{array}$
$\begin{array}{c} 4 \\ 2 \end{array} \begin{array}{ c } \hline 3_4 \\ \hline \end{array} \begin{array}{c} 5 \\ 6 \end{array}$	$(132)(456)$	$(14)(25)(36)$	$\begin{array}{c} 1 \\ 6 \end{array} \begin{array}{ c } \hline 4_3 \\ \hline \end{array} \begin{array}{c} 1 \\ 2 \end{array}$

Berechnung eines zu einem $h \in H$ konjugierten Elements

(eines Elements einer zu H konjugierten Untergruppe)

Wahl zweier Gruppenelemente:

<i>Umdrehen der Diagonale:</i>	$\begin{array}{c} 6 \\ 4 \end{array} \begin{array}{ c } \hline 5_2 \\ \hline \end{array} \begin{array}{c} 3 \\ 1 \\ 3 \end{array}$	$h \in H$	$(15)(26)(34)$
<i>Vierteldrehung:</i>	$\begin{array}{c} 1 \\ 5 \end{array} \begin{array}{ c } \hline 1_6 \\ \hline \end{array} \begin{array}{c} 2 \\ 4 \end{array}$	$\delta \in G$	$[1](2354)[6]$

Berechnung des konjugierten Elements $\delta h \delta^{-1}$:

<i>Ausgangsposition:</i>	$\begin{array}{c} 2 \\ 3 \end{array} \begin{array}{ c } \hline 1_6 \\ \hline \end{array} \begin{array}{c} 4 \\ 5 \\ 4 \end{array}$	Id	$[1][2][3][4][5][6]$
<i>Drehung nach links:</i>	$\begin{array}{c} 4 \\ 2 \end{array} \begin{array}{ c } \hline 1_6 \\ \hline \end{array} \begin{array}{c} 5 \\ 3 \\ 6 \end{array}$	δ^{-1}	$[1](2453)[6]$
<i>Drehung aus H :</i>	$\begin{array}{c} 3 \\ 5 \end{array} \begin{array}{ c } \hline 3_4 \\ \hline \end{array} \begin{array}{c} 2 \\ 1 \\ 5 \end{array}$	h	$(15)(26)(34)$
<i>Drehung nach rechts:</i>	$\begin{array}{c} 1 \\ 1 \end{array} \begin{array}{ c } \hline 3_4 \\ \hline \end{array} \begin{array}{c} 6 \\ 2 \\ 5 \end{array}$	δ	$[1](2354)[6]$
<i>ergibt zusammen:</i>	$\begin{array}{c} 2 \\ 1 \end{array} \begin{array}{ c } \hline 3_4 \\ \hline \end{array} \begin{array}{c} 6 \\ 5 \\ 2 \end{array}$	$\delta h \delta^{-1} \in \delta H \delta^{-1}$	$(13)(25)(46)$

Untergruppe H Drehungen, die eine Hauptdiagonale
 (von links oben nach rechts unten) in sich überführen.

$\begin{array}{c} 2 \\ \square \\ 3 \end{array} \begin{array}{c} 1 \\ 6 \\ \square \end{array} \begin{array}{c} 4 \\ \\ 4 \end{array}$	$[1][2][3][4][5][6]$	$(16)(24)(35)$	$\begin{array}{c} 4 \\ \square \\ 5 \end{array} \begin{array}{c} 6 \\ 1 \\ \square \end{array} \begin{array}{c} 2 \\ \\ 2 \end{array}$
$\begin{array}{c} 5 \\ 3 \\ \square \\ 1 \end{array} \begin{array}{c} 2 \\ 5 \\ \square \end{array} \begin{array}{c} 6 \\ \\ 6 \end{array}$	$(123)(465)$	$(15)(26)(34)$	$\begin{array}{c} 3 \\ 6 \\ \square \\ 4 \end{array} \begin{array}{c} 5 \\ 2 \\ \square \end{array} \begin{array}{c} 3 \\ \\ 3 \end{array}$
$\begin{array}{c} 4 \\ 1 \\ \square \\ 2 \end{array} \begin{array}{c} 3 \\ 4 \\ \square \end{array} \begin{array}{c} 5 \\ \\ 6 \end{array}$	$(132)(456)$	$(14)(25)(36)$	$\begin{array}{c} 1 \\ 5 \\ \square \\ 6 \end{array} \begin{array}{c} 4 \\ 3 \\ \square \end{array} \begin{array}{c} 1 \\ \\ 2 \end{array}$

konjugierte Untergruppe $\delta H \delta^{-1}$, δ Vierteldrehung (nach rechts)

$\begin{array}{c} 2 \\ \square \\ 3 \end{array} \begin{array}{c} 1 \\ 6 \\ \square \end{array} \begin{array}{c} 4 \\ \\ 4 \end{array}$	$[1][2][3][4][5][6]$	$(16)(24)(35)$	$\begin{array}{c} 4 \\ \square \\ 5 \end{array} \begin{array}{c} 6 \\ 1 \\ \square \end{array} \begin{array}{c} 2 \\ \\ 2 \end{array}$
$\begin{array}{c} 5 \\ 1 \\ \square \\ 5 \end{array} \begin{array}{c} 4 \\ 3 \\ \square \end{array} \begin{array}{c} 2 \\ \\ 2 \end{array}$	$(142)(356)$	$(1364)[2][5]$	$\begin{array}{c} 3 \\ 2 \\ \square \\ 6 \end{array} \begin{array}{c} 5 \\ 4 \\ \square \end{array} \begin{array}{c} 1 \\ \\ 1 \end{array}$
$\begin{array}{c} 6 \\ 4 \\ \square \\ 6 \end{array} \begin{array}{c} 3 \\ 5 \\ \square \end{array} \begin{array}{c} 1 \\ \\ 3 \end{array}$	$(124)(365)$	$(1562)[3][4]$	$\begin{array}{c} 5 \\ 1 \\ \square \\ 3 \end{array} \begin{array}{c} 4 \\ 2 \\ \square \end{array} \begin{array}{c} 4 \\ \\ 6 \end{array}$

konjugierte Untergruppe $\delta^2 H \delta^{-2}$

$\begin{array}{c} 2 \\ \square \\ 3 \end{array} \begin{array}{c} 1 \\ 6 \\ \square \end{array} \begin{array}{c} 4 \\ \\ 4 \end{array}$	$[1][2][3][4][5][6]$	$(16)(24)(35)$	$\begin{array}{c} 4 \\ \square \\ 5 \end{array} \begin{array}{c} 6 \\ 1 \\ \square \end{array} \begin{array}{c} 2 \\ \\ 2 \end{array}$
$\begin{array}{c} 5 \\ 4 \\ \square \\ 1 \end{array} \begin{array}{c} 3 \\ 5 \\ \square \end{array} \begin{array}{c} 6 \\ \\ 6 \end{array}$	$(153)(246)$	$(1265)[3][4]$	$\begin{array}{c} 3 \\ 6 \\ \square \\ 3 \end{array} \begin{array}{c} 5 \\ 2 \\ \square \end{array} \begin{array}{c} 4 \\ \\ 4 \end{array}$
$\begin{array}{c} 3 \\ 2 \\ \square \\ 1 \end{array} \begin{array}{c} 4 \\ 3 \\ \square \end{array} \begin{array}{c} 6 \\ \\ 6 \end{array}$	$(1463)[2][5]$	$(135)(264)$	$\begin{array}{c} 5 \\ 6 \\ \square \\ 5 \end{array} \begin{array}{c} 4 \\ 1 \\ \square \end{array} \begin{array}{c} 2 \\ \\ 1 \end{array}$

konjugierte Untergruppe $\delta^3 H \delta^{-3} = \delta^{-1} H \delta$

$\begin{array}{c} 2 \\ \square \\ 3 \end{array} \begin{array}{c} 1 \\ 6 \\ \square \end{array} \begin{array}{c} 4 \\ \\ 4 \end{array}$	$[1][2][3][4][5][6]$	$(16)(24)(35)$	$\begin{array}{c} 4 \\ \square \\ 5 \end{array} \begin{array}{c} 6 \\ 1 \\ \square \end{array} \begin{array}{c} 2 \\ \\ 2 \end{array}$
$\begin{array}{c} 5 \\ 5 \\ \square \\ 1 \end{array} \begin{array}{c} 3 \\ 4 \\ \square \end{array} \begin{array}{c} 6 \\ \\ 6 \end{array}$	$(13)(25)(46)$	$(145)(326)$	$\begin{array}{c} 3 \\ 6 \\ \square \\ 2 \end{array} \begin{array}{c} 5 \\ 4 \\ \square \end{array} \begin{array}{c} 5 \\ \\ 5 \end{array}$
$\begin{array}{c} 2 \\ 3 \\ \square \\ 6 \end{array} \begin{array}{c} 4 \\ 5 \\ \square \end{array} \begin{array}{c} 1 \\ \\ 4 \end{array}$	$(154)(362)$	$(12)(34)(56)$	$\begin{array}{c} 1 \\ 1 \\ \square \\ 4 \end{array} \begin{array}{c} 6 \\ 2 \\ \square \end{array} \begin{array}{c} 3 \\ \\ 3 \end{array}$

Untergruppe H

$\begin{array}{c} 2 \\ 3 \square 1_6 4 \\ 5 \\ 3 \end{array}$	$[1][2][3][4][5][6]$	$(16)(24)(35)$	$\begin{array}{c} 4 \\ 5 \square 6_1 2 \\ 3 \\ 6 \end{array}$
$\begin{array}{c} 4 \\ 1 \square 2_5 6 \\ 1 \\ 4 \end{array}$	$(123)(465)$	$(15)(26)(34)$	$\begin{array}{c} 1 \\ 4 \square 5_2 3 \\ 5 \\ 1 \end{array}$
$\begin{array}{c} 1 \\ 2 \square 3_4 5 \\ 6 \end{array}$	$(132)(456)$	$(14)(25)(36)$	$\begin{array}{c} 1 \\ 6 \square 4_3 1 \\ 2 \end{array}$

Nebenklasse $H\delta$

$\begin{array}{c} 3 \\ 5 \square 1_6 2 \\ 4 \\ 5 \end{array}$	$[1](2354)[6]$	$(16)[2](34)[5]$	$\begin{array}{c} 2 \\ 4 \square 6_1 3 \\ 5 \\ 6 \end{array}$
$\begin{array}{c} 4 \\ 1 \square 3_4 6 \\ 2 \\ 1 \end{array}$	$(13)(25)(46)$	$(145)(326)$	$\begin{array}{c} 1 \\ 2 \square 4_3 5 \\ 4 \\ 1 \end{array}$
$\begin{array}{c} 1 \\ 3 \square 5_2 4 \\ 6 \end{array}$	$(1562)[3][4]$	$(124)(365)$	$\begin{array}{c} 1 \\ 6 \square 2_5 1 \\ 3 \end{array}$

Nebenklasse $H\delta^2$

$\begin{array}{c} 5 \\ 4 \square 1_6 3 \\ 2 \\ 4 \end{array}$	$[1](25)(34)[6]$	$(16)(23)(45)$	$\begin{array}{c} 3 \\ 2 \square 6_1 5 \\ 4 \\ 6 \end{array}$
$\begin{array}{c} 3 \\ 1 \square 5_2 6 \\ 1 \\ 3 \end{array}$	$(153)(246)$	$(1265)[3][4]$	$\begin{array}{c} 1 \\ 3 \square 2_5 4 \\ 2 \\ 1 \end{array}$
$\begin{array}{c} 1 \\ 5 \square 4_3 2 \\ 6 \end{array}$	$(142)(356)$	$(1364)[2][5]$	$\begin{array}{c} 1 \\ 6 \square 3_4 1 \\ 5 \end{array}$

Nebenklasse $H\delta^3 = H\delta^{-1}$

$\begin{array}{c} 4 \\ 2 \square 1_6 5 \\ 3 \\ 2 \end{array}$	$[1](2453)[6]$	$(16)(25)[3][4]$	$\begin{array}{c} 5 \\ 3 \square 6_1 4 \\ 2 \\ 6 \end{array}$
$\begin{array}{c} 3 \\ 1 \square 4_3 6 \\ 5 \\ 1 \end{array}$	$(1463)[2][5]$	$(135)(264)$	$\begin{array}{c} 1 \\ 5 \square 3_4 2 \\ 3 \\ 1 \end{array}$
$\begin{array}{c} 1 \\ 4 \square 2_5 3 \\ 6 \end{array}$	$(12)(34)(56)$	$(154)(362)$	$\begin{array}{c} 1 \\ 6 \square 5_2 1 \\ 4 \end{array}$

($\delta = (2354)$ Vierteldrehung)

Untergruppe H			
$\begin{matrix} 2 \\ 3 \end{matrix} \boxed{1_6} \begin{matrix} 4 \\ 5 \end{matrix}$	$[1][2][3][4][5][6]$ Id	$(16)(24)(35)$	$\begin{matrix} 4 \\ 5 \end{matrix} \boxed{6_1} \begin{matrix} 2 \\ 3 \end{matrix}$
$\begin{matrix} 5 \\ 1 \end{matrix} \boxed{2_5} \begin{matrix} 6 \\ 4 \end{matrix}$	$(123)(465)$	$(15)(26)(34)$	$\begin{matrix} 3 \\ 4 \end{matrix} \boxed{5_2} \begin{matrix} 6 \\ 1 \end{matrix}$
$\begin{matrix} 4 \\ 2 \end{matrix} \boxed{3_4} \begin{matrix} 5 \\ 6 \end{matrix}$	$(132)(456)$	$(14)(25)(36)$	$\begin{matrix} 1 \\ 6 \end{matrix} \boxed{4_3} \begin{matrix} 5 \\ 2 \end{matrix}$
Nebenklasse δH			
$\begin{matrix} 3 \\ 5 \end{matrix} \boxed{1_6} \begin{matrix} 2 \\ 4 \end{matrix}$	$[1](2354)[6]$	$(16)(25)[3][4]$	$\begin{matrix} 5 \\ 3 \end{matrix} \boxed{6_1} \begin{matrix} 4 \\ 2 \end{matrix}$
$\begin{matrix} 4 \\ 4 \end{matrix} \boxed{2_5} \begin{matrix} 3 \\ 1 \end{matrix}$	$(12)(34)(56)$	$(153)(246)$	$\begin{matrix} 2 \\ 1 \end{matrix} \boxed{5_2} \begin{matrix} 6 \\ 4 \end{matrix}$
$\begin{matrix} 6 \\ 6 \end{matrix} \boxed{3_4} \begin{matrix} 1 \\ 2 \end{matrix}$	$(1364)[2][5]$	$(145)(326)$	$\begin{matrix} 3 \\ 2 \end{matrix} \boxed{4_3} \begin{matrix} 5 \\ 6 \end{matrix}$
Nebenklasse $\delta^2 H$			
$\begin{matrix} 5 \\ 4 \end{matrix} \boxed{1_6} \begin{matrix} 3 \\ 2 \end{matrix}$	$[1](25)(34)[6]$	$(16)(23)(45)$	$\begin{matrix} 3 \\ 2 \end{matrix} \boxed{6_1} \begin{matrix} 5 \\ 4 \end{matrix}$
$\begin{matrix} 6 \\ 6 \end{matrix} \boxed{2_5} \begin{matrix} 1 \\ 4 \end{matrix}$	$(124)(365)$	$(1562)[3][4]$	$\begin{matrix} 4 \\ 3 \end{matrix} \boxed{5_2} \begin{matrix} 6 \\ 1 \end{matrix}$
$\begin{matrix} 5 \\ 5 \end{matrix} \boxed{3_4} \begin{matrix} 2 \\ 1 \end{matrix}$	$(135)(264)$	$(1463)[2][5]$	$\begin{matrix} 1 \\ 1 \end{matrix} \boxed{4_3} \begin{matrix} 6 \\ 5 \end{matrix}$
Nebenklasse $\delta^3 H = \delta^{-1} H$			
$\begin{matrix} 4 \\ 2 \end{matrix} \boxed{1_6} \begin{matrix} 5 \\ 3 \end{matrix}$	$[1](2453)[6]$	$(16)[2](34)[5]$	$\begin{matrix} 2 \\ 4 \end{matrix} \boxed{6_1} \begin{matrix} 3 \\ 5 \end{matrix}$
$\begin{matrix} 3 \\ 3 \end{matrix} \boxed{2_5} \begin{matrix} 4 \\ 6 \end{matrix}$	$(1265)[3][4]$	$(154)(362)$	$\begin{matrix} 5 \\ 6 \end{matrix} \boxed{5_2} \begin{matrix} 1 \\ 3 \end{matrix}$
$\begin{matrix} 1 \\ 1 \end{matrix} \boxed{3_4} \begin{matrix} 6 \\ 2 \end{matrix}$	$(13)(25)(46)$	$(142)(356)$	$\begin{matrix} 4 \\ 5 \end{matrix} \boxed{4_3} \begin{matrix} 2 \\ 6 \end{matrix}$

$(\delta = (2354)$ Vierteldrehung)