

Composition of the Symmetries of the Square

	R_0	R_{90}	R_{180}	R_{270}	H	V	D_1	D_2
R_0	R_0	R_{90}	R_{180}	R_{270}	H	V	D_1	D_2
R_{90}	R_{90}	R_{180}	R_{270}	R_{90}	D_2	D_1	H	V
R_{180}	R_{180}	R_{270}	R_0	R_{90}	V	H	D_2	D_1
R_{270}	R_{270}	R_0	R_{90}	R_{180}	D_1	D_2	V	H
H	H	D_1	V	D_2	R_0	R_{180}	R_{90}	R_{270}
V	V	D_2	H	D_1	R_{180}	R_0	R_{270}	R_{90}
D_1	D_1	V	D_2	H	R_{270}	R_{90}	R_0	R_{180}
D_2	D_2	H	D_1	V	R_{90}	R_{270}	R_{180}	R_0