U (R U' R')

y' U' (R' U R)

y' (R' U' R)

(R U R')

(U' R U R') U2 (R U' R')

d (R' U' R) U2' (R' U R)

U' (R U2' R') U2 (R U' R')

d (R' U2 R) U2' (R' U R)

d (R' U' R U')(R' U' R)

U' (R U R' U)(R U R')

U' (R U2' R') d (R' U' R)

d (R' U2 R) d' (R U R')

d (R' U R U')(R' U' R)

U' (R U' R' U)(R U R')

U (R' F R F') U (R U R')

(R U' R' U) d (R' U' R)

(R U2 R') U' (R U R')

y' (R' U2 R) U (R' U' R)

U (R U2 R') U (R U' R')

y' U' (R' U2 R) U' (R' U R)

U2 (R U R' U)(R U' R')

y' U2 (R' U' R U')(R' U R)

U (R' F R F')(R U R') U2 (R U' R')

U'(F R' F' R)y'(R' U' R)U2(R' U' R)

U' (R F R' F') (R U R')

U (R U' R') (F R' F' R)

(R U' R' U)(R U' R')

(R U R' U') F R' F' R

y' (R' U' R U)(R' U' R)

(R U R' U')(R U R')

U' R' F R F' R U' R'

(R U R' U')(R U R' U')(R U R')

(U' R U' R') U2 (R U' R')

U (R U R') U2 (R U R')

(U' R U R') d (R' U' R)

U F' U' F U' (R U R')

y y' x x' z z'

(R U' R') d (R' U2 R) U2' (R' U R)

(R U' R') d (R' U' R)(U' R' U' R)

(R U R') U2 (R U' R' U)(R U R')

(R U' R') d (R' U' R U')(R' U' R)

(R U' R' U) d (R' U' R U') (R' U R)