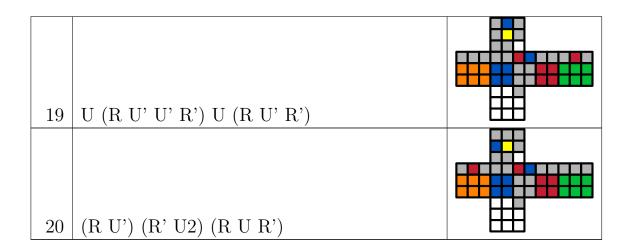
## 1 F2L

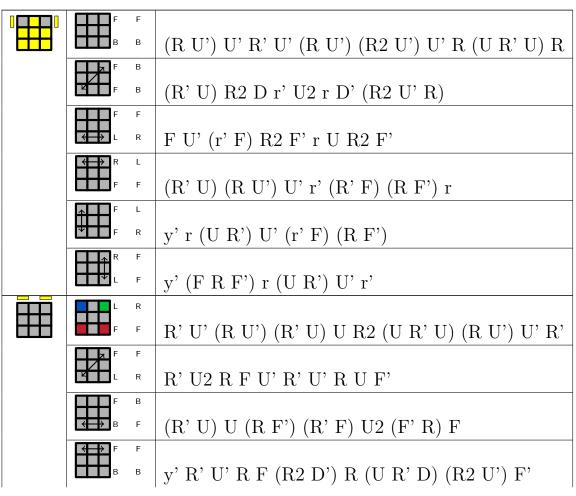
| 1 | R U R' U2 R U R' U2 R U' R'        |  |
|---|------------------------------------|--|
| 2 | (U R U' R')3                       |  |
| 3 | (R U' R' U) (R U'2 R' U) (R U' R') |  |
| 4 | (R U R' U') (R U'2 R' U') (R U R') |  |
| 5 | (R U' R' U) (R U' R')              |  |
| 6 | (R U R' U') (R U R')               |  |

| 7  | U' (R U'2 R' U) (R U R')  |  |
|----|---|--|
| 8  | U' (R U') (R' U2) (R U' R')   |  |
| 9  | URU'R'  |  |
| 10 | 1. (R U') (R' U) (R U') (R' U2) (R U' R') 2. R U2' R' U2' R U2' R U' R' |  |
| 11 | R U2 R' U R U R' U R U' R'  |  |
| 12 | U' (R U' R' U) (R U R')   |  |

| 13 | (R U R') U2 (R U R' U') (R U R') |  |
|----|----------------------------------|--|
| 14 | (R U2) (R' U' R U) R'            |  |
| 15 | U' (R U R' U') (R U2 R')         |  |
| 16 | U' (R U R' U') (R U2 R')         |  |
| 17 | U' (R U2) (R' U2) (R U' R')      |  |
| 18 | R U R'                           |  |



## 2 COLL



| 1 |  |  |
|---|--|--|
|   | F R  |  |
|   | <b>V</b> F                                     | (R2 D') (R U') U' (R' D) (R U') U' R   |
|   | L F  |  |
|   |  |  |
|   | F R  | y2 R2 D (R' U) U (R D') (R' U) (U R')  |
|   | F R  |  |
|   | <b>╞┼┼</b>                                     | D (II D' II) (D II') (D' II) (D II') (D' II) (D II')   |
|   |  | R (U R' U) (R U') (R' U) (R U') (R' U) (R U')  |
|   | F R  | U' R'  |
|   |  |  |
|   | <b>4</b> L B                                   | (L' U) U (R U') (R' U) U L (R U') R'   |
|   | F F  |  |
|   | <del>⟨ → ⟩</del> L B                           | y2 (R U') U' R D (R' U) U (R D') R2  |
|   |  | yz (it o ) o it b (it o) o (it b ) itz   |
|   | <del>⟨ →</del> F B                             |  |
|   | L F  | y' F' r (U R') U' (r' F) R   |
|   | F B  |  |
|   | ₩ L R  | R' F' (L' F) (R F') r U  |
|   |  |  |
|   | F F  |  |
|   | L R  | y (R' U) (U R') D' (R U') U' (R' D) R2   |
|   | F F  |  |
|   | R L  | (D II') II' (D9 II') (D9 II') (D9 II') II' D   |
|   |  | y (R U') U' (R2 U') (R2 U') (R2 U') U' R   |
|   | R L  |  |
|   | FF   | y (R F') U' (R2 F) U' F' U   |
|   | F F  |  |
|   | <b>←→</b> B B                                  | (D II') (n' E) (D' E) n II (n' E) n  |
|   |  | y (R U') (r' F) (R' F) r U (r' F) r  |
|   | F B  |  |
|   | В Б  | y2 F (R2 U') R2 U R2 U F' y (R U') U' R'   |
|   | R F  |  |
|   | <del>                                   </del> | (D II) II D' II (D II) DO II (I II) D (II I )  |
|   |  | $y^2 (N \cup ) \cup N \cup (N \cup ) N^2 \cup (L \cup ) N \cup (L \cup )$  |
|   | <b>├</b>                                       |  |
|   | R F  | (R' U) U R (U R' U) (R2 U') (r' F) R' (F' r)   |
|   | F B  |  |
|   |  | , D (II D, II) (D II) II, D,   |
|   |  | y n (U n U) (n U ) U n   |
|   | B F R F L                                      | y2 F (R2 U') R2 U R2 U F' y (R U') U' R'  y2 (R U') U' R' U' (R U') R2 U (L U') R (U L')  (R' U) U R (U R' U) (R2 U') (r' F) R' (F' r)  y' R (U R' U) (R U') U' R' |

| R L                | D (II D' II) (', E) (D E') II9 D'           |
|--------------------|---|
| R B                | y R (U R' U) (r' F) (R F') r U2 R'          |
| <del>⟨</del> → F F | B' U' R (U R') B U (R U') U' R'             |
| R F                | y' (R U') (r' F) R' (F' r)                  |
| R F                | y2 (F R') U2 (R F') (R' F) U2 (F' R)        |
| F R                |   |
| F B                | y (R' U) U R U F (R' U) (R U') F'           |
| R L                | (R U') U' R' U' (R U') R'                   |
| R L                | y' (R U') U' (r' F) R' (F' r) U' (R U') R'  |
| B L ← F F          | y' L R' U' R U L' U2 (R' U) U R             |
| F L                | y (r' F) (R F') r (U R')                    |
| F R                | y (R U') U' (R' U) U (r' F) (R F') R' r     |
| F L                | y (R' F) U2 (F' R) (F R') U2 (R F')         |
| F F                |   |
| в в                | (R U') U' R' U' R (U R') U' (R U') R'       |
| F F B B            | R (U R' U) y' (R' U) (R U') (R2 F) (R F' R) |
| F F                |   |
| F R                | y R (U R' U) R U (r' F) R' (F' r)           |
| F L                | y (R' F) U2 (F' R) (F R') U2 (R F')         |