Advanced Megaminx Guide
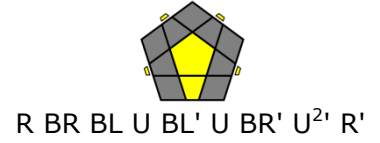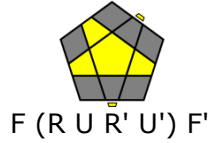
Arranged by Andy Klise
Algorithms by Erik Akkersdijk

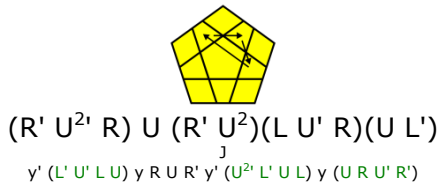## Orient Edges

F (U R U' R') F'

F (R U R' U') F'

R BR BL U BL' U BR' U$^{2\prime}$ R'

Orient Corners

R' U' R U' R' U^2 R

R' U$^{2\prime}$ R U R' U R

[(R' U' R U' R' U^2 R) U']*2

L U L' U L U$^{2\prime}$ L'

L U^2 L' U' L U' L'

R U R' U (R U' R' U) R U$^{2\prime}$ R'
R U R' U R (U' R' U R) U$^{2\prime}$ R'

R U^2 (R' U' R U) R' U' R U' R'
R U^2 R' (U' R U R') U' R U' R'

(R' F)(R BR')(R' F')(R BR)

(F R)(BR R')(F' R)(BR' R')

(R BR)(R' F)(R BR')(R' F')

R$^{2\prime}$ D$_{fr}$' R U^2 R' D$_{fr}$ R U$^{2\prime}$ R

R U^2 R$^{2\prime}$ U' R^2 U' R$^{2\prime}$ U^2 R

Permute Edges

(R' U$^{2\prime}$ R) U (R' U^2)(L U' R)(U L')
J
y' (L' U' L U) y R U R' y' (U$^{2\prime}$ L' U L) y (U R U' R')

F (R U')(R' U' R U)(R' F')(R U R' U')(R' F R F')
Y
y (R U R' U') y' (L' U' L U^2) y R U R' y' (U' L' U L)

(R U R' U')(R' F)(R^2 U')(R' U' R U)(R' F') U^2
T

y$^{2\prime}$ L R U^2 L' U R' L U' R U^2 L' U^2 R'

Permute Corners

"A"
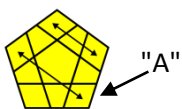
Example 1
(R' D$_{fr}$ R) U$^{2\prime}$
(R' D$_{fr}$' R) U^2
(R' D$_{fr}$ R) U
(R' D$_{fr}$' R) U
(R' D$_{fr}$ R) U'
(R' D$_{fr}$' R)

Adjust U so that 1st misplaced piece ("A") is in the front right
(R' D$_{fr}$ R)
Adjust U so that A's proper location is in the front right position, note the piece now
located in the front right ("B")
(R' D$_{fr}$' R)
Adjust U so that B's proper location is in the front right position
(R' D$_{fr}$ R)
Continue until all but one misplaced piece remains
Adjust U so that the piece in the U layer that does has no yellow is in the front right
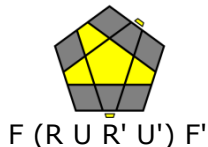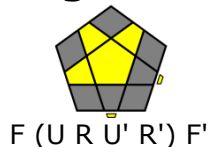(R' D$_{fr}$' R)

Example 2
(R' D$_{fr}$ R) U^2
(R' D$_{fr}$' R) U'
(R' D$_{fr}$ R) U^2
(R' D$_{fr}$' R) U
(R' D$_{fr}$ R) U
(R' D$_{fr}$' R)

Simple Megaminx Guide

Arranged by Andy Klise

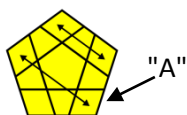Algorithms mainly by Erik Akkersdijk

Orient Edges

F (U R U' R') F'

F (R U R' U') F'

R BR BL U BL' U BR' U$^{2'}$ R'

Permute Edges

R U R' U R U$^{2'}$ R'

R' U' R U' R' U^2 R

(R U R' U')(R' F)(R^2 U')(R' U' R U)(R' F')

Permute Corners

Example 1

(R' D$_{fr}$ R) U$^{2'}$
(R' D$_{fr}$' R) U^2
(R' D$_{fr}$ R) U
(R' D$_{fr}$' R) U
(R' D$_{fr}$ R) U'
(R' D$_{fr}$' R)

"A"

Adjust U so that 1st misplaced piece ("A") is in the front right position
  (R' D$_{fr}$ R)
Adjust U so that A's proper location is in the front right position, note the piece now
 located in the front right ("B")
  (R' D$_{fr}$' R)
Adjust U so that B's proper location is in the front right position
  (R' D$_{fr}$ R)
Continue until all but one misplaced piece remains
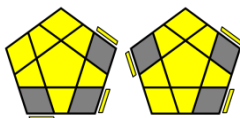Adjust U so that the piece in the U layer that does has no yellow is in the front right
  (R' D$_{fr}$' R)

Example 2

(R' D$_{fr}$ R) U^2
(R' D$_{fr}$' R) U'
(R' D$_{fr}$ R) U^2
(R' D$_{fr}$' R) U
(R' D$_{fr}$ R) U
(R' D$_{fr}$' R)

U' L' U^2 R U$^{2'}$ L U^2 R' U'

Not Essential

U R U$^{2'}$ L' U^2 R' U$^{2'}$ L U

Not Essential

Corner Orientation

Type 1

Adjust U so that the **rightmost** unoriented piece is in the front right
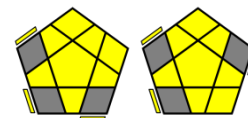 with the U color on the **right**
  (R' D$_{fr}$' R D$_{fr}$)*2
Adjust U so that the **2nd** unoriented piece is in the front right with
 the U color on the **right**
  (R' D$_{fr}$' R D$_{fr}$)*2
Adjust U so that the **3rd** unoriented piece is in the front right with the
 U color on the **right**
  (R' D$_{fr}$' R D$_{fr}$)*2

Adjust U so that the **leftmost** unoriented piece is in the front right
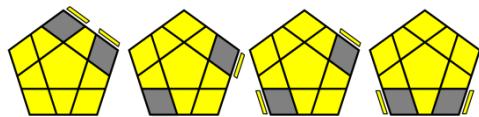 with the U color on the **front**
  (F D$_{fr}$ F' D$_{fr}$')*2
Adjust U so that the **2nd** unoriented piece is in the front right with
 the U color on the **front**
  (F D$_{fr}$ F' D$_{fr}$')*2
Adjust U so that the **3rd** unoriented piece is in the front right with
 the U color on the **front**
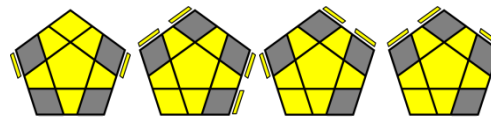 (F D$_{fr}$ F' D$_{fr}$')*2

Type 2

Adjust U so that the unoriented piece is in the front right with its U
 facing the **front**
  (F D$_{fr}$$^{2'}$ F')(R' D$_{fr}$^{2} R)
Adjust U so that the other unoriented piece is in the front right with
 the U color on the **right**
  (R' D$_{fr}$$^{2'}$ R)(F D$_{fr}$^{2} F')

Do Type 2 twice