

Multiverse Go

1 Rules

Multiverse go is a variant similar but distinct from 3D go. Like 3D go, it is played on a 3D goban. However, the rules concerning stone liberties are different. The game is played on a 3D goban; in this document we will use the $5 \times 5 \times 5$ grid as an example. Rather than seeing it as a single $5 \times 5 \times 5$ game of go, it should be seen as 15 separate (but connected) 5×5 games. Each 2D “slice” of the 3D goban represents a separate “flat” game. In practice, when each move in the $5 \times 5 \times 5$ goban corresponds to 3 moves and 12 passes in the 5×5 “slice” gobans.

Each intersection can be identified by using 3D coordinates which range from A1do to E5so (see fig. 1), where

- the first axis uses A, B, C, D, E, etc.;
- the second axis uses 1, 2, 3, 4, 5, etc.; and
- the third axis uses do, re, mi, fa, so, etc.

These 3D coordinates uniquely identify both the 2D “slice” gobans in which the moves are being played, and the coordinates within those “slice” gobans. Each 2D board has a unique name; in $5 \times 5 \times 5$ multiverse go, the names are A, B, C, D, E, 1, 2, 3, 4, 5, do, re, mi, fa, and so. As an example, move B4mi represents the following “flat” coordinates:

- Move 4mi on board B;
- Move Bmi on board 4; and
- Move B4 on board mi.

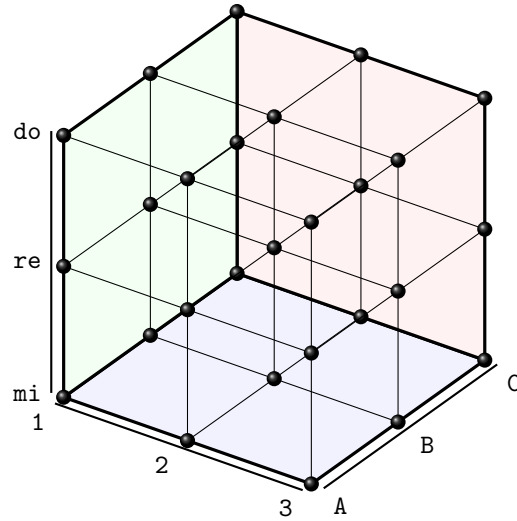


Figure 1: A $3 \times 3 \times 3$ goban and the 3D coordinate system.

A

1	2	3	4	5
do				do
re				re
mi				mi
fa				fa
so				so

B

1	2	3	4	5
do				do
re				re
mi				mi
fa				fa
so				so

C

1	2	3	4	5
do				do
re				re
mi				mi
fa				fa
so				so

D

1	2	3	4	5
do				do
re				re
mi				mi
fa				fa
so				so

E

1	2	3	4	5
do				do
re				re
mi				mi
fa				fa
so				so

1

A	do	re	mi	fa	so	A
B						B
C						C
D						D
E						E

2

A	do	re	mi	fa	so	A
B						B
C						C
D						D
E						E

3

A	do	re	mi	fa	so	A
B						B
C						C
D						D
E						E

4

A	do	re	mi	fa	so	A
B						B
C						C
D						D
E						E

5

A	do	re	mi	fa	so	A
B						B
C						C
D						D
E						E

do

A	B	C	D	E
1				1
2				2
3				3
4				4
5				5

re

A	B	C	D	E
1				1
2				2
3				3
4				4
5				5

mi

A	B	C	D	E
1				1
2				2
3				3
4				4
5				5

fa

A	B	C	D	E
1				1
2				2
3				3
4				4
5				5

so

A	B	C	D	E
1				1
2				2
3				3
4				4
5				5

A

1	2	3	4	5	6	7
do						do
re						re
mi						mi
fa						fa
so						so
la						la
ti						ti

B

1	2	3	4	5	6	7
do						do
re						re
mi						mi
fa						fa
so						so
la						la
ti						ti

C

1	2	3	4	5	6	7
do						do
re						re
mi						mi
fa						fa
so						so
la						la
ti						ti

D

1	2	3	4	5	6	7
do						do
re						re
mi						mi
fa						fa
so						so
la						la
ti						ti

E

1	2	3	4	5	6	7
do						do
re						re
mi						mi
fa						fa
so						so
la						la
ti						ti

F

1	2	3	4	5	6	7
do						do
re						re
mi						mi
fa						fa
so						so
la						la
ti						ti

G

1	2	3	4	5	6	7
do						do
re						re
mi						mi
fa						fa
so						so
la						la
ti						ti

1

A	do	re	mi	fa	so	la	ti	A
B								B
C								C
D								D
E								E
F								F
G								G

2

A	do	re	mi	fa	so	la	ti	A
B								B
C								C
D								D
E								E
F								F
G								G

3

A	do	re	mi	fa	so	la	ti	A
B								B
C								C
D								D
E								E
F								F
G								G

4

A	do	re	mi	fa	so	la	ti	A
B								B
C								C
D								D
E								E
F								F
G								G

5

A	do	re	mi	fa	so	la	ti	A
B								B
C								C
D								D
E								E
F								F
G								G

6

A	do	re	mi	fa	so	la	ti	A
B								B
C								C
D								D
E								E
F								F
G								G

7

A	do	re	mi	fa	so	la	ti	A
B								B
C								C
D								D
E								E
F								F
G								G

do

1	A	B	C	D	E	F	G	1
2								2
3								3
4								4
5								5
6								6
7								7

re

1	A	B	C	D	E	F	G	1
2								2
3								3
4								4
5								5
6								6
7								7

mi

1	A	B	C	D	E	F	G	1
2								2
3								3
4								4
5								5
6								6
7								7

fa

1	A	B	C	D	E	F	G	1
2								2
3								3
4								4
5								5
6								6
7								7

so

1	A	B	C	D	E	F	G	1
2								2
3								3
4								4
5								5
6								6
7								7

la

1	A	B	C	D	E	F	G	1
2								2
3								3
4								4
5								5
6								6
7								7

ti

1	A	B	C	D	E	F	G	1
2								2
3								3
4								4
5								5
6								6
7								7