

## Minor Penta + 2

Root ~

1,2,b3,4,5,b7	1,b3,2,4,5,b7	1,4,2,b3,5,b7	1,5,2,b3,4,b7	1,b7,2,b3,4,5
1,2,b3,4,b7,5	1,b3,2,4,b7,5	1,4,2,b3,b7,5	1,5,2,b3,b7,4	1,b7,2,b3,5,4
1,2,b3,5,4,b7	1,b3,2,5,4,b7	1,4,2,5,b3,b7	1,5,2,4,b3,b7	1,b7,2,4,b3,5
1,2,b3,5,b7,4	1,b3,2,5,b7,4	1,4,2,5,b7,b3	1,5,2,4,b7,b3	1,b7,2,4,5,b3
1,2,b3,b7,4,5	1,b3,2,b7,4,5	1,4,2,b7,b3,5	1,5,2,b7,b3,4	1,b7,2,5,b3,4
1,2,b3,b7,5,4	1,b3,2,b7,5,4	1,4,2,b7,5,b3	1,5,2,b7,4,b3	1,b7,2,5,4,b3

1,2,4,b3,5,b7	1,b3,4,2,5,b7	1,4,b3,2,5,b7	1,5,b3,2,4,b7	1,b7,b3,2,4,5
1,2,4,b3,b7,5	1,b3,4,2,b7,5	1,4,b3,2,b7,5	1,5,b3,2,b7,4	1,b7,b3,2,5,4
1,2,4,5,b3,b7	1,b3,4,5,2,b7	1,4,b3,5,2,b7	1,5,b3,4,2,b7	1,b7,b3,4,2,5
1,2,4,5,b7,b3	1,b3,4,5,b7,2	1,4,b3,5,b7,2	1,5,b3,4,b7,2	1,b7,b3,4,5,2
1,2,4,b7,b3,5	1,b3,4,b7,2,5	1,4,b3,b7,2,5	1,5,b3,b7,2,4	1,b7,b3,5,2,4
1,2,4,b7,5,b3	1,b3,4,b7,5,2	1,4,b3,b7,5,2	1,5,b3,b7,4,2	1,b7,b3,5,4,2

1,2,5,b3,4,b7	1,b3,5,2,4,b7	1,4,5,2,b3,b7	1,5,4,2,b3,b7	1,b7,4,2,b3,5
1,2,5,b3,b7,4	1,b3,5,2,b7,4	1,4,5,2,b7,b3	1,5,4,2,b7,b3	1,b7,4,2,5,b3
1,2,5,4,b3,b7	1,b3,5,4,2,b7	1,4,5,b3,2,b7	1,5,4,b3,2,b7	1,b7,4,b3,2,5
1,2,5,4,b7,b3	1,b3,5,4,b7,2	1,4,5,b3,b7,2	1,5,4,b3,b7,2	1,b7,4,b3,5,2
1,2,5,b7,b3,4	1,b3,5,b7,2,4	1,4,5,b7,2,b3	1,5,4,b7,2,b3	1,b7,4,5,2,b3
1,2,5,b7,4,b3	1,b3,5,b7,4,2	1,4,5,b7,b3,2	1,5,4,b7,b3,2	1,b7,4,5,b3,2

1,2,b7,b3,4,5	1,b3,b7,2,4,5	1,4,b7,2,b3,5	1,5,b7,2,b3,4	1,b7,5,2,b3,4
1,2,b7,b3,5,4	1,b3,b7,2,5,4	1,4,b7,2,5,b3	1,5,b7,2,4,b3	1,b7,5,2,4,b3
1,2,b7,4,b3,5	1,b3,b7,4,2,5	1,4,b7,b3,2,5	1,5,b7,b3,2,4	1,b7,5,b3,2,4
1,2,b7,4,5,b3	1,b3,b7,4,5,2	1,4,b7,b3,5,2	1,5,b7,b3,4,2	1,b7,5,b3,4,2
1,2,b7,5,b3,4	1,b3,b7,5,2,4	1,4,b7,5,2,b3	1,5,b7,4,2,b3	1,b7,5,4,2,b3
1,2,b7,5,4,b3	1,b3,b7,5,4,2	1,4,b7,5,b3,2	1,5,b7,4,b3,2	1,b7,5,4,b3,2

# Minor Penta + 2

2nd~

2,1,b3,4,5,b7	2,4,b3,1,5,b7	2,5,b3,1,4,b7	2,b7,b3,1,4,5	2,b3,b7,1,4,5
2,1,b3,4,b7,5	2,4,b3,1,b7,5	2,5,b3,1,b7,4	2,b7,b3,1,5,4	2,b3,b7,1,5,4
2,1,b3,5,4,b7	2,4,b3,5,1,b7	2,5,b3,4,1,b7	2,b7,b3,4,1,5	2,b3,b7,4,1,5
2,1,b3,5,b7,4	2,4,b3,5,b7,1	2,5,b3,4,b7,1	2,b7,b3,4,5,1	2,b3,b7,4,5,1
2,1,b3,b7,4,5	2,4,b3,b7,1,5	2,5,b3,b7,1,4	2,b7,b3,5,1,4	2,b3,b7,5,1,4
2,1,b3,b7,5,4	2,4,b3,b7,5,1	2,5,b3,b7,4,1	2,b7,b3,5,4,1	2,b3,b7,5,4,1

2,1,4,5,b7,b3	2,4,1,5,b7,b3	2,5,1,4,b7,b3	2,b7,1,4,5,b3	2,b3,1,4,5,b7
2,1,4,5,b3,b7	2,4,1,5,b3,b7	2,5,1,4,b3,b7	2,b7,1,4,b3,5	2,b3,1,4,b7,5
2,1,4,b7,5,b3	2,4,1,b7,5,b3	2,5,1,b7,4,b3	2,b7,1,5,4,b3	2,b3,1,5,4,b7
2,1,4,b7,b3,5	2,4,1,b7,b3,5	2,5,1,b7,b3,4	2,b7,1,5,b3,4	2,b3,1,5,b7,4
2,1,4,b3,5,b7	2,4,1,b3,5,b7	2,5,1,b3,4,b7	2,b7,1,b3,4,5	2,b3,1,b7,4,5
2,1,4,b3,b7,5	2,4,1,b3,b7,5	2,5,1,b3,b7,4	2,b7,1,b3,5,4	2,b3,1,b7,5,4

2,1,5,4,b7,b3	2,4,5,1,b7,b3	2,5,4,1,b7,b3	2,b7,4,1,5,b3	2,b3,4,1,5,b7
2,1,5,4,b3,b7	2,4,5,1,b3,b7	2,5,4,1,b3,b7	2,b7,4,1,b3,5	2,b3,4,1,b7,5
2,1,5,b7,4,b3	2,4,5,b7,1,b3	2,5,4,b7,1,b3	2,b7,4,5,1,b3	2,b3,4,5,1,b7
2,1,5,b7,b3,4	2,4,5,b7,b3,1	2,5,4,b7,b3,1	2,b7,4,5,b3,1	2,b3,4,5,b7,1
2,1,5,b3,4,b7	2,4,5,b3,1,b7	2,5,4,b3,1,b7	2,b7,4,b3,1,5	2,b3,4,b7,1,5
2,1,5,b3,b7,4	2,4,5,b3,b7,1	2,5,4,b3,b7,1	2,b7,4,b3,5,1	2,b3,4,b7,5,1

2,1,b7,4,5,b3	2,4,b7,1,5,b3	2,5,b7,1,4,b3	2,b7,5,1,4,b3	2,b3,5,1,4,b7
2,1,b7,4,b3,5	2,4,b7,1,b3,5	2,5,b7,1,b3,4	2,b7,5,1,b3,4	2,b3,5,1,b7,4
2,1,b7,5,4,b3	2,4,b7,5,1,b3	2,5,b7,4,1,b3	2,b7,5,4,1,b3	2,b3,5,4,1,b7
2,1,b7,5,b3,4	2,4,b7,5,b3,1	2,5,b7,4,b3,1	2,b7,5,4,b3,1	2,b3,5,4,b7,1
2,1,b7,b3,4,5	2,4,b7,b3,1,5	2,5,b7,b3,1,4	2,b7,5,b3,1,4	2,b3,5,b7,1,4
2,1,b7,b3,5,4	2,4,b7,b3,5,1	2,5,b7,b3,4,1	2,b7,5,b3,4,1	2,b3,5,b7,4,1

# Minor Penta + 2

b3rd~

b3,1,2,4,5,b7	b3,2,1,4,5,b7	b3,4,1,2,5,b7	b3,5,1,2,4,b7	b3,b7,1,2,4,5
b3,1,2,4,b7,5	b3,2,1,4,b7,5	b3,4,1,2,b7,5	b3,5,1,2,b7,4	b3,b7,1,2,5,4
b3,1,2,5,4,b7	b3,2,1,5,4,b7	b3,4,1,5,2,b7	b3,5,1,4,2,b7	b3,b7,1,4,2,5
b3,1,2,5,b7,4	b3,2,1,5,b7,4	b3,4,1,5,b7,2	b3,5,1,4,b7,2	b3,b7,1,4,5,2
b3,1,2,b7,4,5	b3,2,1,b7,4,5	b3,4,1,b7,2,5	b3,5,1,b7,2,4	b3,b7,1,5,2,4
b3,1,2,b7,5,4	b3,2,1,b7,5,4	b3,4,1,b7,5,2	b3,5,1,b7,4,2	b3,b7,1,5,4,2

b3,1,4,2,5,b7	b3,2,4,1,5,b7	b3,4,2,1,5,b7	b3,5,2,1,4,b7	b3,b7,2,1,4,5
b3,1,4,2,b7,5	b3,2,4,1,b7,5	b3,4,2,1,b7,5	b3,5,2,1,b7,4	b3,b7,2,1,5,4
b3,1,4,5,2,b7	b3,2,4,5,1,b7	b3,4,2,5,1,b7	b3,5,2,4,1,b7	b3,b7,2,4,1,5
b3,1,4,5,b7,2	b3,2,4,5,b7,1	b3,4,2,5,b7,1	b3,5,2,4,b7,1	b3,b7,2,4,5,1
b3,1,4,b7,2,5	b3,2,4,b7,1,5	b3,4,2,b7,1,5	b3,5,2,b7,1,4	b3,b7,2,5,1,4
b3,1,4,b7,5,2	b3,2,4,b7,5,1	b3,4,2,b7,5,1	b3,5,2,b7,4,1	b3,b7,2,5,4,1

b3,1,5,2,4,b7	b3,2,5,1,4,b7	b3,4,5,1,2,b7	b3,5,4,1,2,b7	b3,b7,4,1,2,5
b3,1,5,2,b7,4	b3,2,5,1,b7,4	b3,4,5,1,b7,2	b3,5,4,1,b7,2	b3,b7,4,1,5,2
b3,1,5,4,2,b7	b3,2,5,4,1,b7	b3,4,5,2,1,b7	b3,5,4,2,1,b7	b3,b7,4,2,1,5
b3,1,5,4,b7,2	b3,2,5,4,b7,1	b3,4,5,2,b7,1	b3,5,4,2,b7,1	b3,b7,4,2,5,1
b3,1,5,b7,2,4	b3,2,5,b7,1,4	b3,4,5,b7,1,2	b3,5,4,b7,1,2	b3,b7,4,5,1,2
b3,1,5,b7,4,2	b3,2,5,b7,4,1	b3,4,5,b7,2,1	b3,5,4,b7,2,1	b3,b7,4,5,2,1

b3,1,b7,2,4,5	b3,2,b7,1,4,5	b3,4,b7,1,2,5	b3,5,b7,1,2,4	b3,b7,5,1,2,4
b3,1,b7,2,5,4	b3,2,b7,1,5,4	b3,4,b7,1,5,2	b3,5,b7,1,4,2	b3,b7,5,1,4,2
b3,1,b7,4,2,5	b3,2,b7,4,1,5	b3,4,b7,2,1,5	b3,5,b7,2,1,4	b3,b7,5,2,1,4
b3,1,b7,4,5,2	b3,2,b7,4,5,1	b3,4,b7,2,5,1	b3,5,b7,2,4,1	b3,b7,5,2,4,1
b3,1,b7,5,2,4	b3,2,b7,5,1,4	b3,4,b7,5,1,2	b3,5,b7,4,1,2	b3,b7,5,4,1,2
b3,1,b7,5,4,2	b3,2,b7,5,4,1	b3,4,b7,5,2,1	b3,5,b7,4,2,1	b3,b7,5,4,2,1

# Minor Penta + 2

4th~

4,1,2,b3,5,b7	4,2,1,b3,5,b7	4,b3,1,2,5,b7	4,5,1,2,b3,b7	4,b7,1,2,b3,5
4,1,2,b3,b7,5	4,2,1,b3,b7,5	4,b3,1,2,b7,5	4,5,1,2,b7,b3	4,b7,1,2,5,b3
4,1,2,5,b3,b7	4,2,1,5,b3,b7	4,b3,1,5,2,b7	4,5,1,b3,2,b7	4,b7,1,b3,2,5
4,1,2,5,b7,b3	4,2,1,5,b7,b3	4,b3,1,5,b7,2	4,5,1,b3,b7,2	4,b7,1,b3,5,2
4,1,2,b7,b3,5	4,2,1,b7,b3,5	4,b3,1,b7,2,5	4,5,1,b7,2,b3	4,b7,1,5,2,b3
4,1,2,b7,5,b3	4,2,1,b7,5,b3	4,b3,1,b7,5,2	4,5,1,b7,b3,2	4,b7,1,5,b3,2

4,1,b3,2,5,b7	4,2,b3,1,5,b7	4,b3,2,1,5,b7	4,5,2,1,b3,b7	4,b7,2,1,b3,5
4,1,b3,2,b7,5	4,2,b3,1,b7,5	4,b3,2,1,b7,5	4,5,2,1,b7,b3	4,b7,2,1,5,b3
4,1,b3,5,2,b7	4,2,b3,5,1,b7	4,b3,2,5,1,b7	4,5,2,b3,1,b7	4,b7,2,b3,1,5
4,1,b3,5,b7,2	4,2,b3,5,b7,1	4,b3,2,5,b7,1	4,5,2,b3,b7,1	4,b7,2,b3,5,1
4,1,b3,b7,2,5	4,2,b3,b7,1,5	4,b3,2,b7,1,5	4,5,2,b7,1,b3	4,b7,2,5,1,b3
4,1,b3,b7,5,2	4,2,b3,b7,5,1	4,b3,2,b7,5,1	4,5,2,b7,b3,1	4,b7,2,5,b3,1

4,1,5,2,b3,b7	4,2,5,1,b3,b7	4,b3,5,1,2,b7	4,5,b3,1,2,b7	4,b7,b3,1,2,5
4,1,5,2,b7,b3	4,2,5,1,b7,b3	4,b3,5,1,b7,2	4,5,b3,1,b7,2	4,b7,b3,1,5,2
4,1,5,b3,2,b7	4,2,5,b3,1,b7	4,b3,5,2,1,b7	4,5,b3,2,1,b7	4,b7,b3,2,1,5
4,1,5,b3,b7,2	4,2,5,b3,b7,1	4,b3,5,2,b7,1	4,5,b3,2,b7,1	4,b7,b3,2,5,1
4,1,5,b7,2,b3	4,2,5,b7,1,b3	4,b3,5,b7,1,2	4,5,b3,b7,1,2	4,b7,b3,5,1,2
4,1,5,b7,b3,2	4,2,5,b7,b3,1	4,b3,5,b7,2,1	4,5,b3,b7,2,1	4,b7,b3,5,2,1

4,1,b7,2,b3,5	4,2,b7,1,b3,5	4,b3,b7,1,2,5	4,5,b7,1,2,b3	4,b7,5,1,2,b3
4,1,b7,2,5,b3	4,2,b7,1,5,b3	4,b3,b7,1,5,2	4,5,b7,1,b3,2	4,b7,5,1,b3,2
4,1,b7,b3,2,5	4,2,b7,b3,1,5	4,b3,b7,2,1,5	4,5,b7,2,1,b3	4,b7,5,2,1,b3
4,1,b7,b3,5,2	4,2,b7,b3,5,1	4,b3,b7,2,5,1	4,5,b7,2,b3,1	4,b7,5,2,b3,1
4,1,b7,5,2,b3	4,2,b7,5,1,b3	4,b3,b7,5,1,2	4,5,b7,b3,1,2	4,b7,5,b3,1,2
4,1,b7,5,b3,2	4,2,b7,5,b3,1	4,b3,b7,5,2,1	4,5,b7,b3,2,1	4,b7,5,b3,2,1

## Minor Penta + 2

5th~

5,1,2,b3,4,b7	5,2,1,b3,4,b7	5,b3,1,2,4,b7	5,4,1,2,b3,b7	5,b7,1,2,b3,4
5,1,2,b3,b7,4	5,2,1,b3,b7,4	5,b3,1,2,b7,4	5,4,1,2,b7,b3	5,b7,1,2,4,b3
5,1,2,4,b3,b7	5,2,1,4,b3,b7	5,b3,1,4,2,b7	5,4,1,b3,2,b7	5,b7,1,b3,2,4
5,1,2,4,b7,b3	5,2,1,4,b7,b3	5,b3,1,4,b7,2	5,4,1,b3,b7,2	5,b7,1,b3,4,2
5,1,2,b7,b3,4	5,2,1,b7,b3,4	5,b3,1,b7,2,4	5,4,1,b7,2,b3	5,b7,1,4,2,b3
5,1,2,b7,4,b3	5,2,1,b7,4,b3	5,b3,1,b7,4,2	5,4,1,b7,b3,2	5,b7,1,4,b3,2

5,1,b3,2,4,b7	5,2,b3,1,4,b7	5,b3,2,1,4,b7	5,4,2,1,b3,b7	5,b7,2,1,b3,4
5,1,b3,2,b7,4	5,2,b3,1,b7,4	5,b3,2,1,b7,4	5,4,2,1,b7,b3	5,b7,2,1,4,b3
5,1,b3,4,2,b7	5,2,b3,4,1,b7	5,b3,2,4,1,b7	5,4,2,b3,1,b7	5,b7,2,b3,1,4
5,1,b3,4,b7,2	5,2,b3,4,b7,1	5,b3,2,4,b7,1	5,4,2,b3,b7,1	5,b7,2,b3,4,1
5,1,b3,b7,2,4	5,2,b3,b7,1,4	5,b3,2,b7,1,4	5,4,2,b7,1,b3	5,b7,2,4,1,b3
5,1,b3,b7,4,2	5,2,b3,b7,4,1	5,b3,2,b7,4,1	5,4,2,b7,b3,1	5,b7,2,4,b3,1

5,1,4,2,b3,b7	5,2,4,1,b3,b7	5,b3,4,1,2,b7	5,4,b3,1,2,b7	5,b7,b3,1,2,4
5,1,4,2,b7,b3	5,2,4,1,b7,b3	5,b3,4,1,b7,2	5,4,b3,1,b7,2	5,b7,b3,1,4,2
5,1,4,b3,2,b7	5,2,4,b3,1,b7	5,b3,4,2,1,b7	5,4,b3,2,1,b7	5,b7,b3,2,1,4
5,1,4,b3,b7,2	5,2,4,b3,b7,1	5,b3,4,2,b7,1	5,4,b3,2,b7,1	5,b7,b3,2,4,1
5,1,4,b7,2,b3	5,2,4,b7,1,b3	5,b3,4,b7,1,2	5,4,b3,b7,1,2	5,b7,b3,4,1,2
5,1,4,b7,b3,2	5,2,4,b7,b3,1	5,b3,4,b7,2,1	5,4,b3,b7,2,1	5,b7,b3,4,2,1

5,1,b7,2,b3,4	5,2,b7,1,b3,4	5,b3,b7,1,2,4	5,4,b7,1,2,b3	5,b7,4,1,2,b3
5,1,b7,2,4,b3	5,2,b7,1,4,b3	5,b3,b7,1,4,2	5,4,b7,1,b3,2	5,b7,4,1,b3,2
5,1,b7,b3,2,4	5,2,b7,b3,1,4	5,b3,b7,2,1,4	5,4,b7,2,1,b3	5,b7,4,2,1,b3
5,1,b7,b3,4,2	5,2,b7,b3,4,1	5,b3,b7,2,4,1	5,4,b7,2,b3,1	5,b7,4,2,b3,1
5,1,b7,4,2,b3	5,2,b7,4,1,b3	5,b3,b7,4,1,2	5,4,b7,b3,1,2	5,b7,4,b3,1,2
5,1,b7,4,b3,2	5,2,b7,4,b3,1	5,b3,b7,4,2,1	5,4,b7,b3,2,1	5,b7,4,b3,2,1

## Minor Penta + 2

b7th~

b7,1,2,b3,4,5	b7,2,1,b3,4,5	b7,b3,1,2,4,5	b7,4,1,2,b3,5	b7,5,1,2,b3,4
b7,1,2,b3,5,4	b7,2,1,b3,5,4	b7,b3,1,2,5,4	b7,4,1,2,5,b3	b7,5,1,2,4,b3
b7,1,2,4,b3,5	b7,2,1,4,b3,5	b7,b3,1,4,2,5	b7,4,1,b3,2,5	b7,5,1,b3,2,4
b7,1,2,4,5,b3	b7,2,1,4,5,b3	b7,b3,1,4,5,2	b7,4,1,b3,5,2	b7,5,1,b3,4,2
b7,1,2,5,b3,4	b7,2,1,5,b3,4	b7,b3,1,5,2,4	b7,4,1,5,2,b3	b7,5,1,4,2,b3
b7,1,2,5,4,b3	b7,2,1,5,4,b3	b7,b3,1,5,4,2	b7,4,1,5,b3,2	b7,5,1,4,b3,2

b7,1,b3,2,4,5	b7,2,b3,1,4,5	b7,b3,2,1,4,5	b7,4,2,1,b3,5	b7,5,2,1,b3,4
b7,1,b3,2,5,4	b7,2,b3,1,5,4	b7,b3,2,1,5,4	b7,4,2,1,5,b3	b7,5,2,1,4,b3
b7,1,b3,4,2,5	b7,2,b3,4,1,5	b7,b3,2,4,1,5	b7,4,2,b3,1,5	b7,5,2,b3,1,4
b7,1,b3,4,5,2	b7,2,b3,4,5,1	b7,b3,2,4,5,1	b7,4,2,b3,5,1	b7,5,2,b3,4,1
b7,1,b3,5,2,4	b7,2,b3,5,1,4	b7,b3,2,5,1,4	b7,4,2,5,1,b3	b7,5,2,4,1,b3
b7,1,b3,5,4,2	b7,2,b3,5,4,1	b7,b3,2,5,4,1	b7,4,2,5,b3,1	b7,5,2,4,b3,1

b7,1,4,2,b3,5	b7,2,4,1,b3,5	b7,b3,4,1,2,5	b7,4,b3,1,2,5	b7,5,b3,1,2,4
b7,1,4,2,5,b3	b7,2,4,1,5,b3	b7,b3,4,1,5,2	b7,4,b3,1,5,2	b7,5,b3,1,4,2
b7,1,4,b3,2,5	b7,2,4,b3,1,5	b7,b3,4,2,1,5	b7,4,b3,2,1,5	b7,5,b3,2,1,4
b7,1,4,b3,5,2	b7,2,4,b3,5,1	b7,b3,4,2,5,1	b7,4,b3,2,5,1	b7,5,b3,2,4,1
b7,1,4,5,2,b3	b7,2,4,5,1,b3	b7,b3,4,5,1,2	b7,4,b3,5,1,2	b7,5,b3,4,1,2
b7,1,4,5,b3,2	b7,2,4,5,b3,1	b7,b3,4,5,2,1	b7,4,b3,5,2,1	b7,5,b3,4,2,1

b7,1,5,2,b3,4	b7,2,5,1,b3,4	b7,b3,5,1,2,4	b7,4,5,1,2,b3	b7,5,4,1,2,b3
b7,1,5,2,4,b3	b7,2,5,1,4,b3	b7,b3,5,1,4,2	b7,4,5,1,b3,2	b7,5,4,1,b3,2
b7,1,5,b3,2,4	b7,2,5,b3,1,4	b7,b3,5,2,1,4	b7,4,5,2,1,b3	b7,5,4,2,1,b3
b7,1,5,b3,4,2	b7,2,5,b3,4,1	b7,b3,5,2,4,1	b7,4,5,2,b3,1	b7,5,4,2,b3,1
b7,1,5,4,2,b3	b7,2,5,4,1,b3	b7,b3,5,4,1,2	b7,4,5,b3,1,2	b7,5,4,b3,1,2
b7,1,5,4,b3,2	b7,2,5,4,b3,1	b7,b3,5,4,2,1	b7,4,5,b3,2,1	b7,5,4,b3,2,1