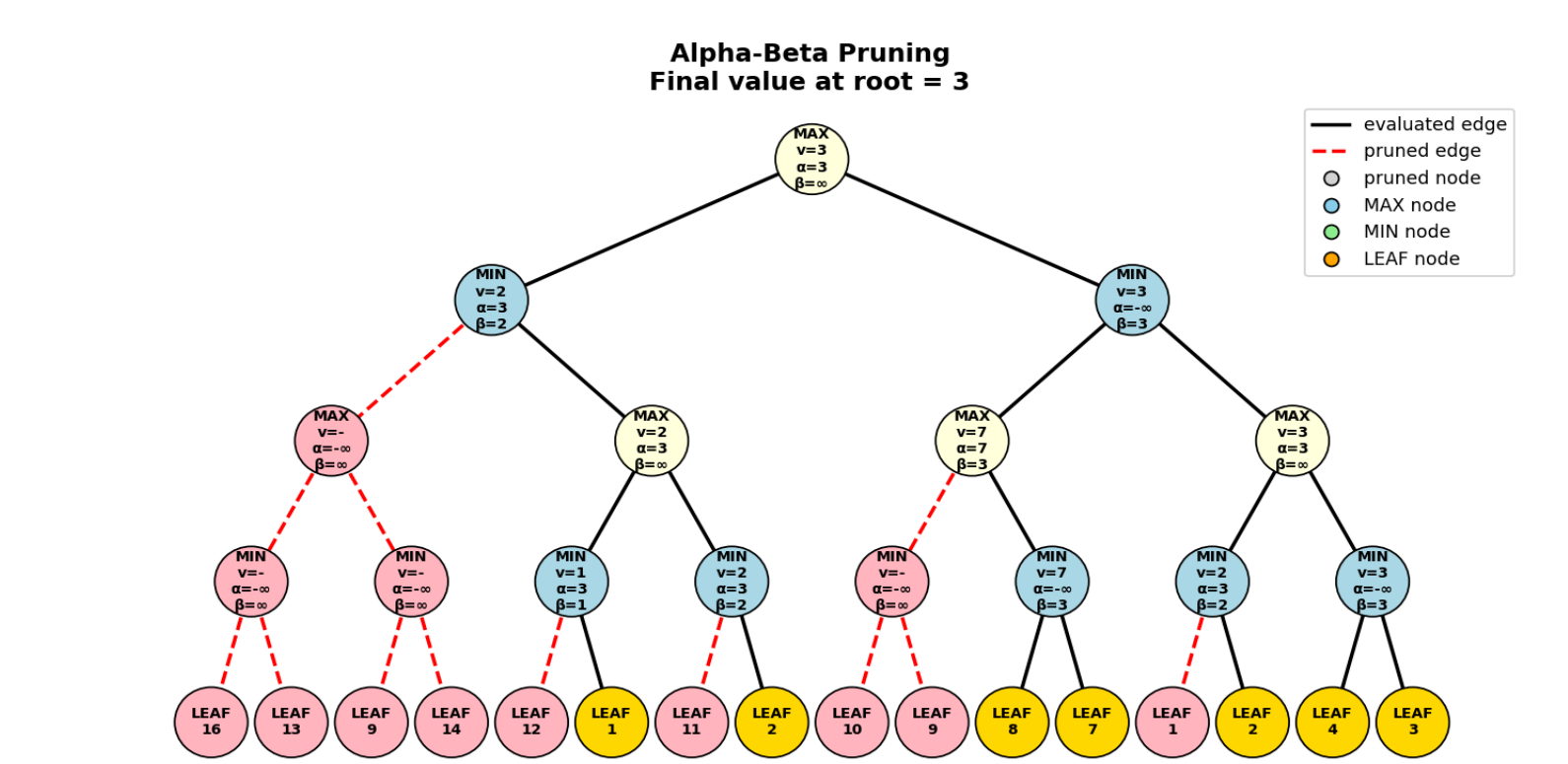
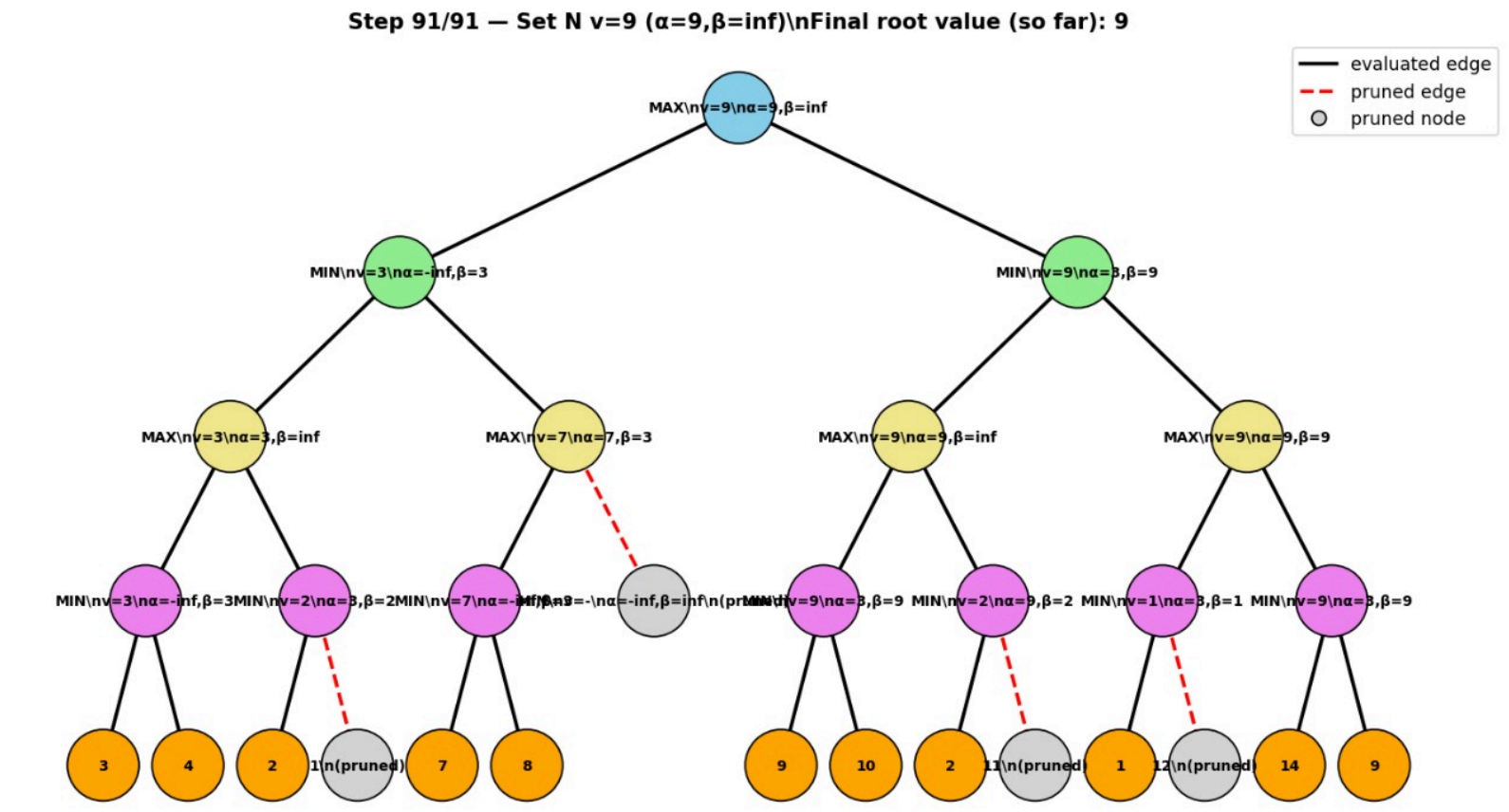
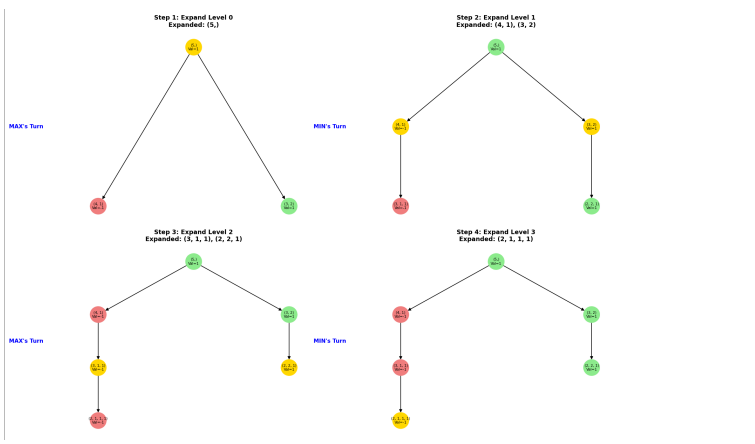

Alpha-Beta Pruning
Final value at root = 3
evaluated edge
pruned edge
pruned node
MAX node
MIN node
LEAF node
MAX v=3 α=3 β=∞
MIN v=2 α=3 β=2
MIN v=3 α=-∞ β=3
MAX v=- α=-∞ β=∞
MAX v=2 α=3 β=∞
MAX v=7 α=7 β=3
MAX v=3 α=3 β=∞
MIN v=- α=-∞ β=∞
MIN v=- α=-∞ β=∞
MIN v=1 α=3 β=1
MIN v=2 α=3 β=2
MIN v=- α=-∞ β=∞
MIN v=7 α=-∞ β=3
MIN v=2 α=3 β=2
MIN v=3 α=-∞ β=3
LEAF 16
LEAF 13
LEAF 9
LEAF 14
LEAF 12
LEAF 1
LEAF 11
LEAF 2
LEAF 10
LEAF 9
LEAF 8
LEAF 7
LEAF 1
LEAF 2
LEAF 4
LEAF 3


Step 91/91 — Set N v=9 (α=9,β=inf)\nFinal root value (so far): 9
evaluated edge
pruned edge
pruned node
MAX\nv=9\nα=9,β=inf
MIN\nv=3\nα=-inf,β=3
MIN\nv=9\nα=3,β=9
MAX\nv=3\nα=3,β=inf
MAX\nv=7\nα=7,β=3
MAX\nv=9\nα=9,β=inf
MAX\nv=9\nα=9,β=9
MIN\nv=3\nα=-inf,β=3
MIN\nv=2\nα=3,β=2
MIN\nv=7\nα=-\nα=-inf,β=inf\n(pr
MIN\nv=9\nα=3,β=9
MIN\nv=2\nα=9,β=2
MIN\nv=1\nα=3,β=1
MIN\nv=9\nα=3,β=9
3
4
2
1\n(pruned)
7
8
9
10
2
1\n(pruned)
1
2\n(pruned)
14
9


Step 1: Expand Level 0
Expanded: (5,)
Step 2: Expand Level 1
Expanded: (4, 1), (3, 2)
Step 3: Expand Level 2
Expanded: (3, 1, 1), (2, 2, 1)
Step 4: Expand Level 3
Expanded: (2, 1, 1, 1)
MAX's Turn
MIN's Turn
MAX's Turn
MIN's Turn