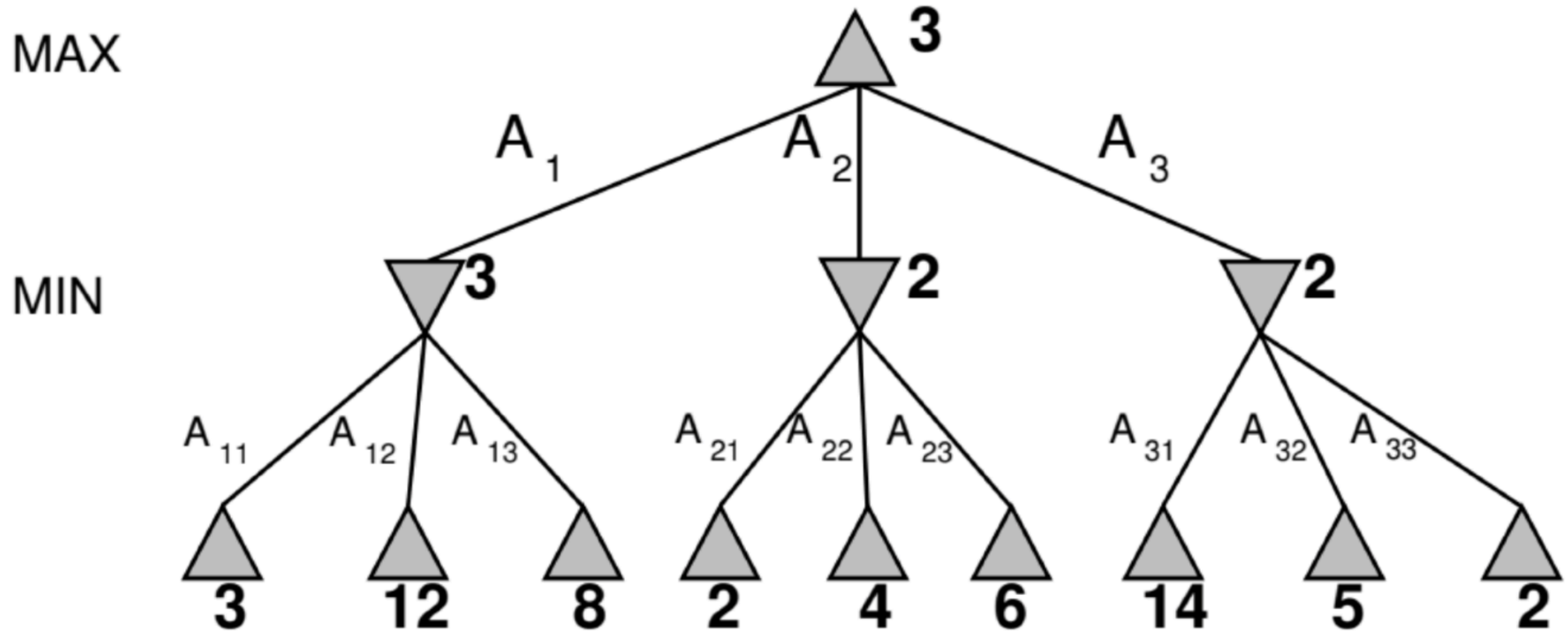
$\alpha - \beta$ pruning

- The value is bounded by $[\beta, \alpha]$

- Optimality
- Perfect: $b^{m/2}$



Improvement of $\alpha - \beta$ pruning

- Set the depth limit
- Using EVAL (estimated function) instead of UTILITY
  - Properties: monotonically leads to optimality.
  - You don’t need exact values
- Result: Depth 8 chess algorithm? Not still good enough…

- Other methods includes prior pruning…