

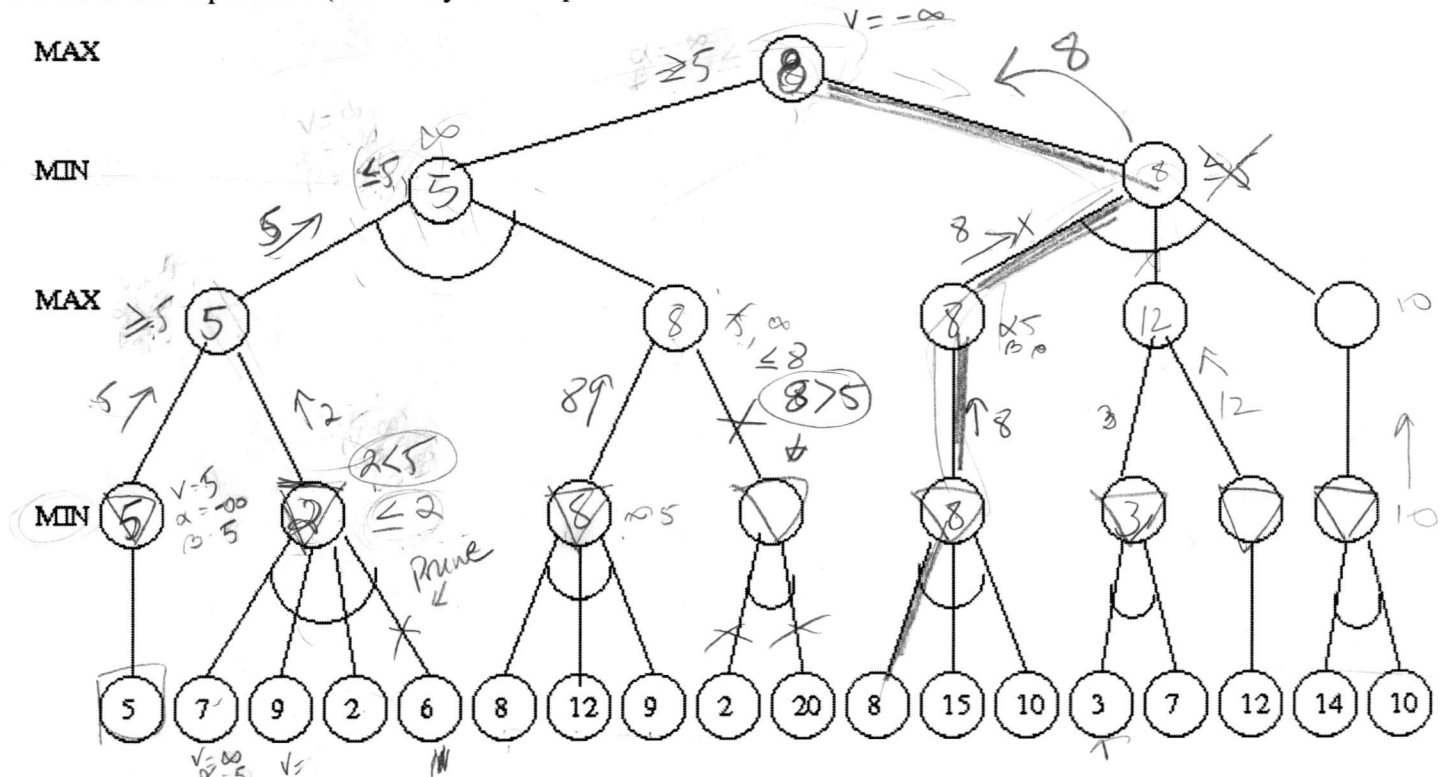
Problem Set 2

Assigned: Feb. 17.

Due: Mar. 3

Problem 1

Show the results of applying alpha-beta pruning to the following game tree. What is the best move for MAX at the top level? (You may do the problem on this sheet.)



Problem 2

Convert the following sentences in the propositional logic to clausal form.

$$(A \vee B) \Leftrightarrow (\sim C \wedge D).$$

A V B V E

C. V. G.

$$\sim (D \wedge E \wedge G).$$
$$G \Rightarrow E.$$

Problem 3

Trace the action of the Davis-Putnam algorithm applied to the clauses in problem 2. Assume that, when the algorithm encounters a branch point, it selects the first atom in alphabetical order, and that it tries "TRUE" before "FALSE".