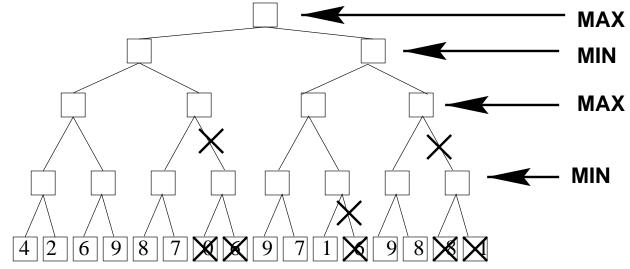
ICS 171 — Quiz #4 — TWENTY (20) minutes

1. (5 pts) NAME AND E	MAIL ADDRESS:	_
YOUR ID:	ID TO RIGHT:	NO. FROM RIGHT:

2. (25 pts max, -5 for each error, but not negative) MINI-MAX SEARCH IN GAME TREES.

The game tree below illustrates one position reached in the game. It is MAX's turn to move. Inside each leaf node is the estimated score of that resulting position returned by the heuristic static evaluator. CROSS OUT EACH LEAF NODE THAT WILL **NOT** BE EXAMINED BECAUSE IT IS PRUNED BY ALPHA-BETA PRUNING.



3. (10 pts each, 30 pts total) Assume that you have two text documents, D1 and D2, and a text query, Q. Assume that similarity is computed using a simple dot product: $sim(Q, D) = \sum_{term \in Q} w(term, Q)w(term, D)$

Text document D1 term weights, w(term, D1): Electronic(0.1), Modem(0.2), Network(0.15).

Text document D2 term weights, w(term, D2): Consumer(0.1), Electronic(0.1), Entertainment(0.15)

Text query Q term weights, w(term, Q): Games(0.1), Electronic(0.1), Entertainment(0.1)

- a. What is sim(Q, D1)? _____0.01
- b. What is sim(Q, D2)? ______0.025
- c. Which document is selected? $\underline{\hspace{1cm}}$ $\underline{\hspace{1cm}}$ $\underline{\hspace{1cm}}$ $\underline{\hspace{1cm}}$ $\underline{\hspace{1cm}}$

- 4. (10 pts each, 40 pts total) Give four things that characterize an information retrieval (IR) system (or, four steps in a "typical IR system")
- a. A document collection (or, document preprocessing).
- b. A query (or, query processing)
- c. A result set (or, retrieval of relevant documents)
- d. Presentation
- e. (Relevance feedback)