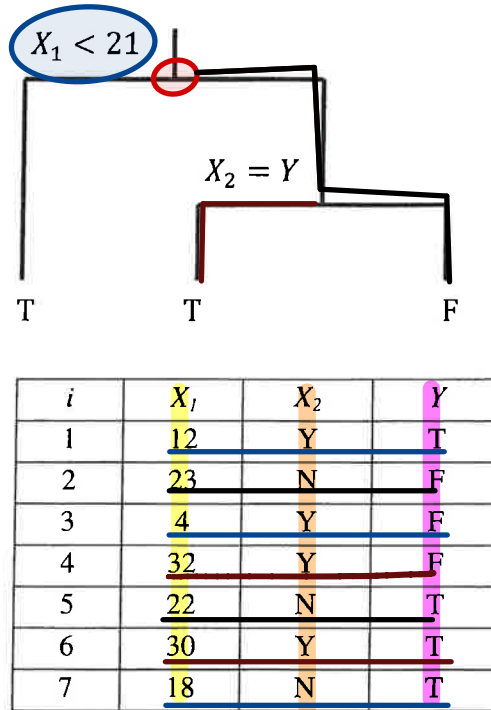


40.

You are given the following classification decision tree and data set:



Determine the relationship between the classification error rate, the Gini index, and the cross-entropy, summed across all nodes.

- A. cross-entropy > Gini index > classification error rate
- B. cross-entropy > Gini index = classification error rate
- C. classification error rate > Gini index > cross-entropy
- D. Gini index > cross-entropy > classification error rate
- E. The answer is not given by (A), (B), (C), or (D).

→: Caveat: They explicitly say: "summed across all nodes" which is different from computing a weighted average!