

Determine the logical status of the following wffs using the truth-tree method:

Name:

E-mail:

1. $(A \equiv (B \vee C)) \supset (A \equiv (B \vee C))$ *check your answer*

contingency

2. $\sim((K \vee \sim K) \vee \sim(K \vee \sim K))$

contingency

3. $(A \supset (A \vee B)) \supset (A \equiv (A \vee B))$

contingency

4. $\sim(((A \vee \sim A) \supset B) \supset (A \vee \sim A)) \supset (A \vee \sim A)$

contingency

5. $(C \supset D) \supset ((C \equiv D) \supset (C \vee E))$

contingency

6. $\sim K \vee (\sim K \vee K)$

contingency

7. $((J \vee R) \& Z) \supset (J \vee R)$

contingency

8. $((A \& B) \& (C \& (D \& E))) \& ((A \& B) \& (C \& (D \& E)))$

contingency

9. $(A \equiv \sim B) \supset (B \supset \sim A)$

contingency

10. $(\sim J \& (\sim K \supset \sim \sim J)) \supset K$

contingency