

Test the formal proof of validity :

$$1. A \supset \sim (B \supset C) \therefore A \supset B$$

$$2. A \supset B \therefore (A \cdot C) \supset B$$

$$3. (R \vee S) \supset (T \cdot U)$$

$$\sim R \supset (V \supset \sim V)$$

$$\sim T \therefore \sim V$$

$$4. D \supset (N \supset G)$$

$$\sim G \cdot D \therefore \sim N$$