

Homework Handout #3 - Practice Problems for Test #3

1. 1. $G \supset H$
 2. $G \supset I$ / $G \supset (H \cdot I)$
2. 1. $J \equiv K$
 2. $\sim K \equiv \sim L$ / $J \equiv L$
3. 1. M / $N \supset \{O \supset \{P \supset [(M \cdot N) \cdot (O \cdot P)]\}\}$
4. Prove that ' $R \supset [(R \supset S) \supset S]$ ' is a logical truth.
5. 1. $D \supset E$
 2. $E \supset (F \cdot G)$
 3. $\sim F \vee \sim G$ / $\sim D$
6. 1. $(P \vee Q) \vee (\sim R \vee S)$
 2. $\sim Q \cdot (\sim S \cdot \sim P)$ / $\sim R$
7. Prove that ' $A \vee [(\sim A \vee B) \cdot (\sim A \vee C)]$ ' is a logical truth
8. 1. $(A \vee B) \supset \sim(F \cdot D)$
 2. $\sim(A \cdot \sim D)$
 3. $\sim F \supset \sim(C \cdot D)$
 4. $C \vee A$ / $A \equiv \sim C$
9. 1. $(A \cdot B) \supset C$
 2. $(F \cdot D) \supset E$
 3. $A \cdot D$
 4. $B \vee F$ / $C \vee E$
10. 1. $\sim F \supset (G \cdot H)$
 2. $F \supset (I \vee J)$
 3. $\sim[G \cdot (K \cdot \sim J)]$
 4. $K \equiv (L \cdot \sim J)$ / $K \supset I$