

First 5 Replacement Rules
Problem Set

1.

1. $M \vee (N \vee G)$

2. $G \rightarrow R$

3. $[(N \vee M) \rightarrow H] \cdot \sim R$ $\therefore H$

2.

1. $\sim E \cdot C$

2. $A \cdot \sim L$

3. $M \rightarrow (E \vee L)$ $\therefore \sim M$

3.

1. $\sim G \rightarrow \sim R$

2. $\sim S \rightarrow \sim G$ $\therefore R \rightarrow S$

4.

1. $Y \cdot H$

2. $(\sim G \vee Y) \rightarrow P$

3. $N \vee (\sim H \vee \sim P)$ $\therefore \sim \sim N$

5.

1. $V \vee \sim A$

2. $(S \cdot D) \rightarrow B$

3. $A \cdot (B \rightarrow \sim V)$ $\therefore \sim S \vee \sim D$

6.

1. $(K \vee \sim \sim L) \vee \sim R$

2. $(\sim B \vee \sim R) \cdot \sim K$

3. $\sim A \rightarrow (\sim L \cdot R)$ $\therefore A \vee B$

7.

1. $\sim F \rightarrow (M \cdot I)$

2. $F \rightarrow \sim \sim R$ $\therefore \sim (I \cdot M) \rightarrow R$

