

Conditional Proof  
Problem Set

1.

1.  $K \rightarrow \sim A$

2.  $G \vee (\sim M \vee A)$

3.  $M \vee A$   $\therefore (K \cdot \sim M) \rightarrow G$

2.

1.  $N \vee (\sim L \cdot C)$

2.  $\sim E \rightarrow \sim N$   $\therefore L \rightarrow (W \vee E)$

3.

1.  $(H \vee T) \rightarrow U$

2.  $M \vee (J \cdot \sim U)$   $\therefore T \rightarrow M$

4.

1.  $(P \cdot B) \vee \sim Y$

2.  $Y \leftrightarrow K$

3.  $P \rightarrow (B \cdot K)$   $\therefore P \leftrightarrow Y$

5.

1.  $M \rightarrow (A \cdot E)$

2.  $R \vee \sim C$

3.  $C \rightarrow (E \cdot A)$   $\therefore \sim(M \vee C) \vee (E \cdot A)$

6.

1.  $W \rightarrow (M \cdot D)$

2.  $O \rightarrow S$

3.  $(J \rightarrow D) \rightarrow (H \vee O)$   $\therefore \sim(S \vee M) \rightarrow H$

7.

1.  $(A \rightarrow M) \vee \sim G$

2.  $G \rightarrow (R \rightarrow \sim M)$   $\therefore G \rightarrow (R \rightarrow \sim A)$

8.

Conditional Proof  
Problem Set

1.  $(E \vee P) \rightarrow \sim N$

2.  $\sim P \rightarrow (E \vee B)$  \_\_\_\_\_  $\therefore \sim N \vee B$

9.

1.  $S \rightarrow (M \cdot K)$

2.  $M \vee J$

3.  $I \rightarrow (K \cdot J)$  \_\_\_\_\_  $\therefore (S \vee I) \rightarrow (K \vee Q)$

10.

1.  $(M \vee \sim H) \leftrightarrow G$

2.  $(D \vee M) \rightarrow A$  \_\_\_\_\_  $\therefore G \rightarrow (H \rightarrow A)$

11.

1.  $(H \vee W) \cdot (P \vee \sim R)$

2.  $(I \cdot H) \rightarrow \sim (P \vee C)$  \_\_\_\_\_  $\therefore (\sim W \cdot \sim Z) \rightarrow (R \rightarrow \sim I)$