

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

15 2. $\sim C$ / $\sim A$

3. $A \supset C$ 1, 2 M.P. (if $\sim C$ ^{then} ~~the~~ from line 1, we know that $(A \supset C)$ is true)

4. $\sim A$ 2, 3 M.T (if $\sim C$ then A cannot be true)

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1: $(K * B) \vee (L \supset E)$

2: $\sim (K * B)$

3: $\sim E$

1 $\sim L$

4: $L \supset E$

1, 2 DS

5: $\sim L$

3, 4 MT

$$1. R \supset (G \vee \sim A)$$

$$2. (G \vee \sim A) \supset \sim S$$

$$17 \quad 3. G \supset S$$

$$4. R \quad \quad \quad 1 \sim A$$

$$5. R \sim A \quad \quad \quad 1, 2 \text{ MP}$$

$$6. \sim A \quad \quad \quad 3, 4 \text{ MT}$$

18 1. $\sim N \supset B \supset D) C(N \vee \sim E)$

2. $(B \supset E) \supset \sim N$

3. $B \supset D$

4. $D \supset E$

1 $\sim D$

5. $B \supset D$

1, 3 MP

6 $\sim D$

3, 4 MT