

(14) **Prove: Z**

(#)	Premise or Inference	#	#	#	RPI or RR
(1)	$[(\sim Z \cdot X) \vee (\sim Z \cdot Y)] \supset Q$				P
(2)	$\sim Q$				P
(3)	$\sim(\sim X \cdot \sim Y)$				P
(4)					
(5)					
(6)					
(7)					
(8)					
(9)					
(10)					
(11)					
(12)					
(13)					
(14)					
(15)					
(16)					

(15) **Prove: $\sim F \supset \sim B$**

(#)	Premise or Inference	#	#	#	RPI or RR
(1)	$\sim(A \cdot B) \cdot (A \vee (B \equiv F))$				P
(2)	$(A \supset \sim B) \supset (\sim B \supset (B \equiv F))$				P
(3)	$\sim(A \vee B)$	1			Smp
(4)	$\sim A \vee \sim B$	3			Dm
(5)	$(A \vee (B \equiv F))$	7			Con
(6)	$A \vee (B \equiv F)$	5			Smp
(7)	$\sim A \supset (B \equiv F)$	6			Imp
(8)	$A \supset \sim B$	4			Imp
(9)	$\sim B \supset (B \equiv F)$	2	8		mp
(10)					
(11)					
(12)					
(13)					
(14)					
(15)					

(16) **Prove: $E \vee C$**

(#)	Premise or Inference	#	#	#	RPI or RR
(1)	$A \vee B$				P
(2)	$A \supset (C \cdot D)$				P
(3)	$B \supset E$				P
(4)					
(5)					
(6)					
(7)					
(8)					
(9)					