

Introduction to Symbolic Logic  
 Test 3 Study Guide

- Construct derivations in SD or SD+ that establish the following:
  - $\{(L \supset \sim Z) \& \sim J, J \equiv (\sim Z \vee \sim L)\}$  is inconsistent in SD or SD+.
  - ' $(A \supset \sim C) \supset ((C \& B) \supset \sim A)$ ' is a theorem in SD or SD+
- Provide derivations showing validity for the following arguments in either SD or SD+.

$(F \supset G) \supset H$   
 $J \supset K$   
 $F \supset (K \supset G)$   
 -----  
 $J \supset H$

$C \supset ((F \vee Q) \& P)$   
 $\sim P$   
 -----  
 $\sim (C \& (F \equiv Q))$

$G \vee \sim (W \vee \sim R)$   
 $(R \& \sim W) \supset \sim G$   
 -----  
 $\sim G \equiv \sim (\sim R \vee W)$