

# H/W 1.3

10.

premises							conclusion		
$p$	$q$	$r$	$\sim q$	$p \wedge \sim q$	$p \wedge \sim q \rightarrow r$	$p \vee q$	$q \rightarrow p$	$r$	
T	T	T	F	F	T	T	T	T	critical row
T	T	F	F	F	T	T	T	F	critical row
T	F	T	T	T	T	T	T	T	critical row
T	F	F	T	T	F	T	T	F	
F	T	T	F	F	T	T	F	T	
F	T	F	F	F	T	T	F	F	
F	F	T	T	F	T	F	T	T	
F	F	F	T	F	T	F	T	F	

In the second row all the premises are true but the conclusion is false. Hence the argument is invalid.