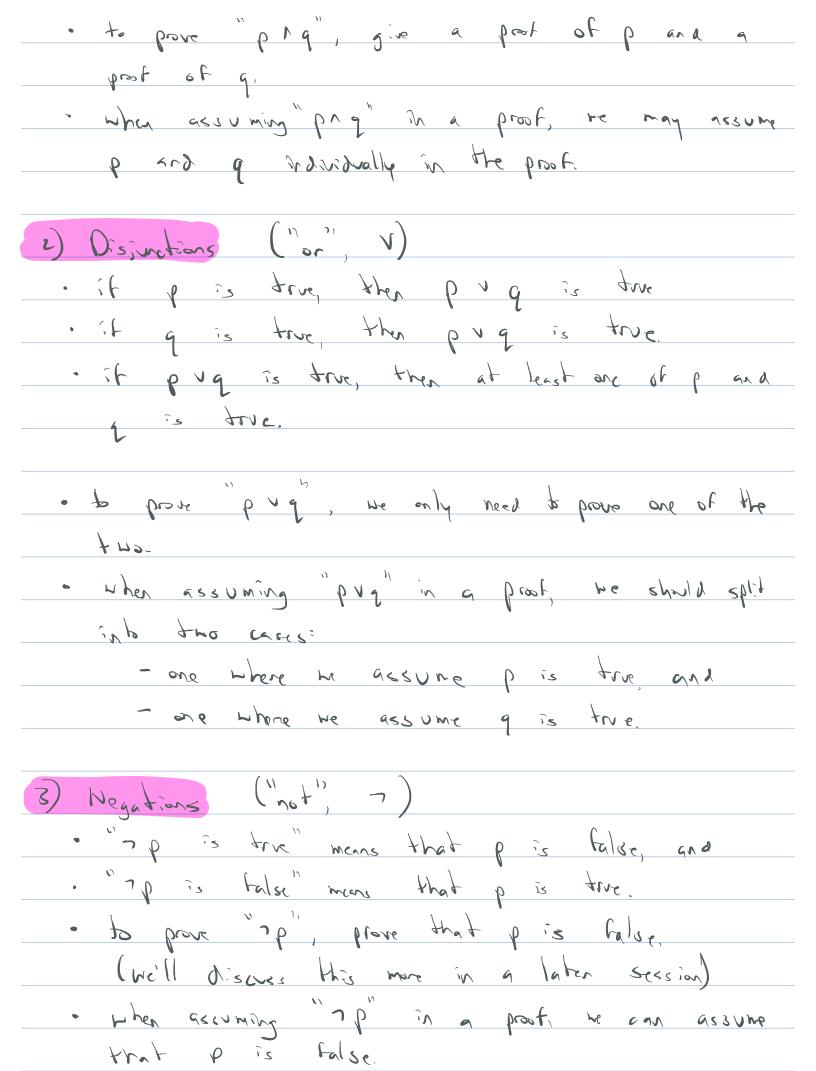
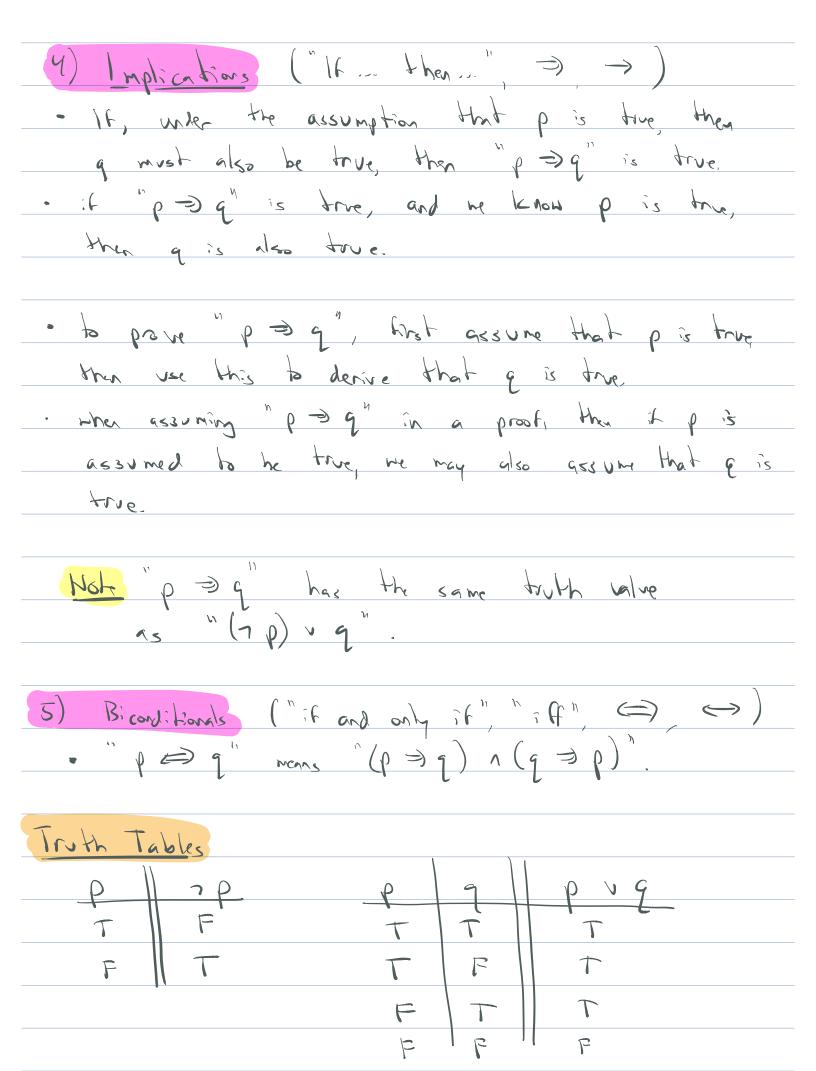
Propositional Logic
Defin A proposition is a statement that can
either be true or false,
A propositional briable is a symbol that represents
a Proposition.
Propositional variables may be assigned a truth value of
"tere" on "false".
h
ex prepresents the sky is cloudy today."
propositional variable proposition
hobozza wel must be had a server
Detin la propositional statement la propositional formula)
is an expression that either is a propositional variable,
or is constituted from simple propositional state ments
and logical connectives.
Logical connectives
1) Conjunctions ("and", 1)
· it p is tree and q is true, then prq is true
insurvally true.
insurvally true.





P	9	png	$\rho \mid g \mid$	$\rho \Rightarrow q$
7	7	T	T	1
Γ	R	F	TF	F
F	\ 	F	FT	T
F	F	F	FF	
	,			
)	1)	1	

	eg	P	9	r	(prg) v (prn)
		,	_	<u> </u>	
T F F F T F F T T		7	T	F	
F T F F T		T	F	+	
F T F F T		T	F	F	
FFT		P	T		
		F	T	F	
E F F		F	F	T	
		F	F	F	

Logic Puzzles

On a remote island, everyone is either a truth-teller on a line.

X

John says, "Bill and I are both liars."

Case anlysis
Truth table