//__ MD Assignment-1 (a) let the statement "it rains" be denoted

by p and a Rayu carrois an umbodia? to

denoted by q HA) Than given p => q We have to validate 9/3p ay P app The core of aget, pot wort be possible because p => ar It is closer that app is not love always given p= ar Home we should the statement is not always tour

2 Mara C. We

chack the validity of have Statement

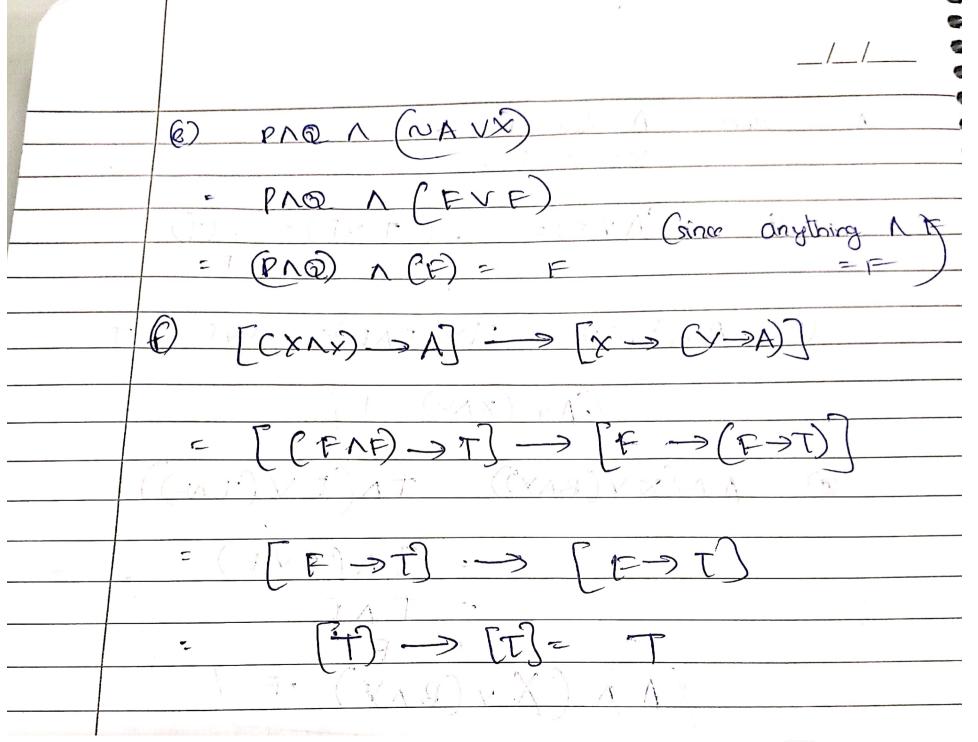
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(PACY -> TOVS) (COVE -> NOVS) (PVS) (T) T T T T T T T T T T T T T T T T T	TETET	
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>50VS) (((xo +> (xo x)) , pvs)		
) D(0/6-2004) PVS T T T T T T T T T T T T T T T T T T T	SVS	
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Charly Poro P2F, 9/2T, 8=F, S=F

the statement T is false

blonce the given statement is false

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21)	Gron A= toue = B
	X= Y= Fabo
	(D) N(AVX)= N(TVF)= N(T)
710	
= = =	9 (1) A (2 A2) F
	(b) AV (XNY) = TV(FNF) = TVF = T
	AV (XNY) =T
	(16 f) 6- 3 C- 10 1 1 .
	(C) AN(XV(BNY)) - TN(FV(TNE))
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	Don't have
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1/00	1 ((a) (a) (900)
V 200	1 (au v 9ca) =
	V TO I V CO IV CO IV



3A)	(60) Found Proof
	(a) RTP P-3 WD, ab -3R -3 P-3R
	Step 17 Setting an axiom or pormie es P
1	1- P Hypothosis
	2. P-> W@ Simplification
	3. NO Mody Ponens rule from 1 and 2
	4. NQ -> R Simplification
	5. R Modes Ponens Sule for 3 and y
	1. We can conclude P->R 13 tour.
	y .

Resolution's P-> NO , NO ->R => P>R hb cur NO-9 R = Q VR (framise)

/
Formal Proof
$(6) \Rightarrow ((PVQ) \land (QP)) \rightarrow Q.$
 PVQ can be assumed as NP -> Q
 As the actual peramise is a Null set, Than RHS
 is to be proved as a Tastology
 Set an initial poemie as NP-30
1. Up -> 32 ltypothsss
2. NP simplification
3. @ Modus Porrors rule for land 2
· ((pra) v (rb)) -> 0

,	
	Resolution
- 1	Resolution inother socyulos car in LHS
Turne	Since those are no boolean equations.
	RHS is a tentology
	ie (CPVQ) ~ NP) -> Q is a toutology
	(CPVQ) N OUP) 75-7Q=
	(PAUP) V (DAUP)
	$= (Q \land NP) \rightarrow Q$
ng (/ j	That E (NO VP) VQ
and in	throwald major sty and
	: =) ((RQ)·1~P)->Q