Assignment 8

[8.1]

P>R>916>a

(13.7P1a.7P(a) V P(9(a))

16 要· 7P(6) V P(9(6))

x 6 10. 7P(9(a)) ~ P(9(9(a))) > 5

X 1d. 7P(9(6)) VP(9(9(6))) 75

20. 7P(a) V R (a, 9(a))

26. 7P(b) V R (6,9(6))

x2c. 7P(g(a)) v P(g(a), g(g(a))) >5

X2d. 7P (9(6)) V P (9(6), 9(9(6))) >5

3. P(a) V P(b)

4. 7R(6.9(6))~P(a)

5. 7R(6,9(6)) VP(6)

4>1526>20>16>10>3

 $\begin{array}{c|c}
\hline
P(a) \vee P(b) \\
P(a) \vee P(g(a)) \\
P(b) \wedge P(g(a))$

Ø, true {R(6,9(6))}

Ø, true

LP(9(G))

Sc

2P(6)4

phinimal balse clause

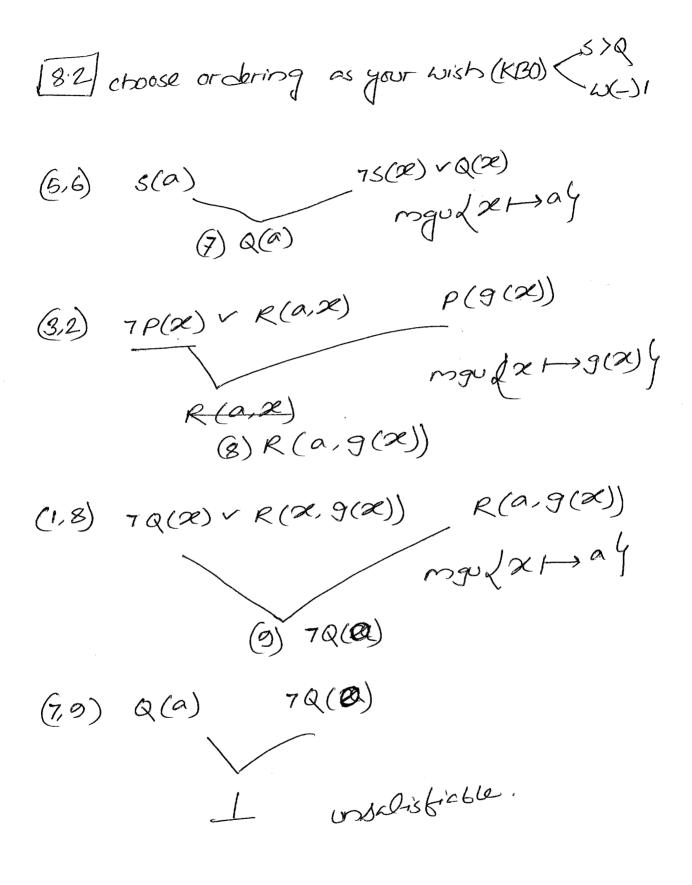
Mct: 7 R (6(9(6)) V P(a)

Prop. Counter part $7P(2) \vee R(\alpha, 9(2))$

mg mg 0 = 0 2 -> 6

P(a) V TP(b) new clause we add upit clause P(a) ground atom.

100		<i>*</i>
0	NC	80
	Ø	P(G)
P(a)		Ø
p(a) v P(b)	2 P(a)4	
	1 p(a) 4	Ø
P(a) ~ 7P(b)	1 1 1	Jp (9(2))9
7P(a) ~ P(g(a))	1 P(G) 4	
11) (0/9/6)	1 P(a), P(g(a))4	Ø
7P(b) VP(9(b))		1 R (a, g (a))
7p(a) v R(a,g(d)	LPG), P(9(4))	
70(1) (8 (6 9/6))	(P(a), P(g(a)), R(a,g(a))	l D
16(P) V (0, 2(0))	1 100	Ø, true.
7R(6.9(6)) VP(a)	Y P(a), P(g(a)), R(a,g(a))	φ, (1 ως
		1 . N. L. F. N
	P(a), P(g(a)), R(a,	9(6)) 4 1
./	PIVIII C	



N finite sagurated satisfiable.

All CEN St.

C= DVL

C = Vo 7 Pi ground

Show: can decide if NU (CY is subisticable

· No inferences between CI, CZ EN, because N is

st scturated.

· Consider inferences bet CI, CZ EN, because Nis

sworkted

C = 7P, V.... VTPn, Pik max grand

N > D, = D1 · V Pi Pi contains the clauses

smaller

D'S V (7P, V. V7P(=, V7P(+1 V-- 10))

D's V TP, V ... V TPn is ground too

we can rewrite a -> a', But since a is a

ground clause,

is well founded, Descend as mony time

CN is the last clause deside sof c #1