

EX-3

[WE CHECKED EX. 23 TODAY.]
[DO EX. 24 FOR NEXT TIME.]

CHECKING FOR A VALID ARGUMENT

EXAMPLES

		P_1	P_2	C
a	b	$a \rightarrow b$	a	b
T	T	T	T	T
T	F	F	T	F
F	T	T	F	T
F	F	T	F	F

NO 'TTF'
SO
VALID

		P_1	P_2	C
a	b	$a \rightarrow b$	b	a
T	T	T	T	T
T	F	F	F	T
F	T	T	T	F
F	F	T	F	F

INVALID
DUE TO
ROW 3

		P_1	P_2	C
a	b	$a \rightarrow b$	$\sim b$	$\sim a$
T	T	T	F	F
T	F	F	T	F
F	T	T	F	T
F	F	T	T	T

NO 'TTF'
SO **VALID**

			P_1	P_2	C
a	b	$\sim b$	$a \wedge (\sim b)$	$a \rightarrow b$	b
T	T	F	F	T	T
T	F	T	T	F	F
F	T	F	F	T	T
F	F	T	F	T	F

NO 'TTF'

SO

VALID

P_1 ALL DOGS ARE ANIMALS.

$$d \rightarrow a$$

d = IT IS A DOG

P_2 ALL DOGS HAVE 4 LEGS.

$$d \rightarrow f$$

a = IT IS AN ANIMAL

f = IT HAS 4 LEGS

C . SO, ALL ANIMALS HAVE 4 LEGS.

$$a \rightarrow f$$

			P_1	P_2	C
d	a	f	$d \rightarrow a$	$d \rightarrow f$	$a \rightarrow f$
T	T	T	T	T	T
T	T	F	T	F	F
T	F	T	F	T	T
T	F	F	F	F	T
F	T	T	T	T	T
F	T	F	T	T	F
F	F	T	T	T	T
F	F	F	T	T	T

INVALID
DUE TO 'TTF'