

KEY ~ Exam 2

Directions: Please write your name on the top of the page. Please write clearly. I

Put tables on blank space or on the back
☺

1. D
2. A
3. A
4. B
5. C
6. 2.
7. D
8. D
9. F
10. T
11. T
12. F
13. T
14. F
15. T
16. T
17. F
18. $\wedge D$
19. $\vee D$
20. $\rightarrow D$
21. $\leftrightarrow D$
22. $\wedge D$
23. $\vee D$
24. $\wedge D$
25. $\wedge \vee D$
26. $\rightarrow D$
27. $\leftrightarrow D$
28. $\vee D$
29. $\leftrightarrow D$
30. $\wedge D$

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P	Q	$\neg(P \wedge Q)$	\leftrightarrow	P
T	T	F	T	T
T	F	T	T	T
F	T	T	F	F
F	F	T	F	F

CONTINGENCY

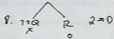
NOT always T nor always F

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1. $P \wedge Q$ ✓
2. $\neg Q \rightarrow R$
3. $S \wedge T$ ✓
4. P
5. $\neg Q$
6. S
7. $\neg M$

[Consistent]

- $\mathcal{D}(R) = T$
- $\mathcal{D}(M) = F$
- $\mathcal{D}(S) = T$
- $\mathcal{D}(P) = T$



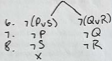
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1. $\neg(P \vee Q)$
2. $\neg(P \rightarrow Q)$
3. $\neg P$
4. $\neg Q$
5. P
6. $\neg Q$

INCONSISTENT

1. $(P \vee S) \rightarrow \neg(Q \vee R)$
2. $\neg(\neg P \vee Z)$ ✓
3. $\neg \neg P$
4. $\neg Z$
5. P

- P
- P
- 2 \vee 0
- 2 \vee 0
- 3 \vee 0



INVALID

$\mathcal{D}(Q) = F, \mathcal{D}(R) = F, \mathcal{D}(P) = T$
 $\mathcal{D}(Z) = F$

Tables
2PTS - Setup
6PTS - CONSTRUCTION
2PTS - ANALYSIS

TREES
2PTS - SETUP
5PTS - CONSTRUCTION
3PTS - ANALYSIS*

*CONDITIONAL ON CORRECT CONSTRUCTION