

Name _____

CSE Login _____

Instructions Follow instructions *carefully*, failure to do so may result in points being deducted. Clearly label each problem and submit the answers *in order*. Staple this cover page to the front of your assignment for easier grading. Late submissions *will not be accepted*. Be sure to show sufficient work to justify your answer(s). If you are asked to prove something, you must give as formal, rigorous, and complete proof as possible. You are to work individually, and all work should be your own. The CSE academic dishonesty policy is in effect (see http://www.cse.unl.edu/undergrads/academic_integrity.php).

Problem	Page	Points	Score
A	-	4	
1.1:22	18	4	
1.1:24	18	4	
1.1:26	18	4	
1.1:28	18	4	
1.1:38*	19	4	
1.2:8ac	26	4	
1.2:20	27	4	
1.2:28	27	4	
1.2:30	27	4	
1.2:50	28	4	
1.2:52	28	4	
1.2:54ab	28	4	

Problem	Page	Points	Score
1.3:12	41	4	
1.3:16ab	41	4	
1.3:18	41	4	
1.3:22	41	4	
1.3:36	42	4	
1.3:46	43	4	
1.3:52	43	4	
1.3:56	44	4	
1.4:40	55	5	
1.4:46bc	55	5	
1.4:48	56	5	
Program			
Typesetting		5	
Total		100	

Additional Instructions

- You must show all logical equivalences *without* using truth tables.
- Exercise 1.1.38 is for bonus points.
- Typesetting the homework is worth 5 points.

Problem A Suppose that $\neg p \rightarrow \neg q$ is known to be false. Give the truth values for

- $p \wedge q$
- $p \vee q$
- $q \rightarrow p$