

Group 1: Entailment

Name _____

Computing ID _____

Honor Notice:

- Assemble into groups of approximately 3.
- Each person in each group should have their own paper.
- Put your name and computing id at the top of this page
- Go to <https://www.cs.virginia.edu/~emo7bf/cs2120/group1.html> and follow the guide there

Problem 1: Identify G $G =$ **Problem 2: Identify F** $F =$

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Problem 3: Complete the truth table

B	T	F	$\neg T$	$\neg B \rightarrow \neg F$	$B \rightarrow T$
0	0	0			
0	0	1			
0	1	0			
0	1	1			
1	0	0			
1	0	1			
1	1	0			
1	1	1			

Problem 4: Name the rule

Problem 5: Show $((B \rightarrow T) \wedge \neg T) \rightarrow \neg B \equiv \top$

Problem 6: Why does $(A \oplus B) \wedge B \vdash \neg A$?

Problem 7: Two things you can conclude

Problem 8: Name the murderer!