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/~njb2b/cs2120/f2022/group1.html** (or scan the QR code or follow the link on the course schedule page) and follow the guide there

Problem 1: Identify G

$G =$

Problem 2: $\top$ or $\bot$

a) b) c) d)

Problem 3: Complete the truth table

A	B	C	$\neg A$	$\neg B$	$\rightarrow$	$\neg C$	B	$\rightarrow$	A
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 $\Big((B \rightarrow A) \wedge \neg A\Big) \rightarrow \neg B \equiv \top$

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

Problem 7: Two things you can conclude

Problem 8: Name the murderer!

 Elizabeth Orrico and Nathan Brunelle