CSc 245 Discrete Structures - Summer 2020

Homework #2

Due: June 19th, 2020 by 5 p.m (MST).

Instructions:

- 1. Homework assignments are to be completed individually, **not** in groups.
- 2. If you need help, take advantage of Piazza and office hours.
- 3. Assignments are to be submitted in PDF form. They may be typed (which is preferable and strongly recommended) or handwritten with each page scanned or photographed and compiled into a single PDF.
- 4. If you choose to handwritten your assignments, please write neatly. Illegible assignments may not be graded.
- 5. Extra credit will be given for typed homework. To make this easier, a Latex template will be provided for each assignment.
- 6. Show your work (when appropriate) for partial credit!

Section	Exercises	Points
1.1	2 a,d,e	3
	4 a,b	4
	$12 \mathrm{g,h}$	4
	18 a,c	2
	22 a,b	4
	26 a,b,e	6
	30 a	3
	34 f	2
	46 b,d	2
	48 b,c	4
1.2	8 d	2
1.3	4 a	2
	8 a,b	4
	16 b	4
Below	1	4
	Total	50
	Typed	+2.5

1. Prove that $\neg((p \lor q) \to \neg q)$ is equivalent to q using the tables of equivalences from the book and slides. Clearly label which rule you use at each step.