

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 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 a or 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  $\neg((p \vee q) \rightarrow \neg q)$  is equivalent to  $q$  using the tables of equivalences from the book and slides. Clearly label which rule you use at each step.