

CSci 1302 Assignment 2

Due Wedn., Feb. 6 in class

Problem 1 (3 points). Exercises 30, 36, 38 on p. 16.

Problem 2 (12 points). Exercises 46, 49, 51 on p. 16.

Problem 3 (16 points). Prove the following:

1. $(q \wedge p) \vee \sim(\sim p \vee \sim q) \equiv p \wedge q$
2. $(p \rightarrow q) \vee (p \rightarrow r) \vee p$ is a tautology,
3. $(p \rightarrow q) \wedge (p \rightarrow r) \wedge p \equiv p \wedge q \wedge r$
4. $p \rightarrow (q \rightarrow r) \equiv (p \wedge q) \rightarrow r$

Problem 4 (4 points). Exercise 18 p. 27

Problem 5 (2 points). Exercises 44, 46 p. 28.