

## CSci 1302 Assignment 2

Due Fri., Feb. 4th in class

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

**Problem 2 (9 points).** Exercises 46, 49, 51 on p. 16.

**Problem 3 (6 points).** Prove the following using logical proofs (not truth tables):

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

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

**Problem 5 (4 points).** Exercises 33, 34 p. 28.