CSE 390Z: Mathematics for Computation Workshop

QuickCheck: Equivalence Proof (due Monday, April 14)

Please submit a response to the following questions on Gradescope. We do not grade on accuracy, so please submit your best attempt. You may either typeset your responses or hand-write them. Note that hand-written solutions must be legible to be graded.

We have created **this template** if you choose to typeset with Latex. **This guide** has specific information about scanning and uploading pdf files to Gradescope.

0. Equivalence Proof

Use a chain of equivalences to show that the following proposition is a tautology (i.e. always true).

$$((p \wedge q) \vee (p \rightarrow (\neg p \wedge r))) \vee p$$

1. Video Solution

Watch **this video** on the solution **after** making an initial attempt. Then, answer the following questions.

(a) What is one thing you took away from the video solution?