

CSE 390Z: Mathematics for Computation Workshop

QuickCheck: Equivalences

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. Equivalences

Consider the proposition $(p \rightarrow q) \vee \neg(q \wedge \neg p)$.

- (a) Use a truth table to show that the proposition is a tautology.
- (b) Use a chain of equivalences to show that the proposition is a tautology.

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?
- (b) What topic from the quick check or lecture would you most like to review in workshop?