

Mathematics 300 Homework, March 24, 2022.

First here are some review questions. Something like one of these will be on the quiz.

Problem 1. Use a truth table to show that $P \rightarrow (Q \vee R)$ is logically equivalent to $(P \wedge \neg Q) \rightarrow R$.

Problem 2. Prove the *transitive property* of congruence modulo n . That is if $a \equiv b \pmod{n}$ and $b \equiv c \pmod{n}$, then $a \equiv c \pmod{n}$.

You should read Section 4.1 in the text and in the problems on pages 180–183 do Problems 1, 2, 3a, 6, 8a.