

To help LaTeX a Truth Table read through, and then copy-cut-paste from, the LaTeX Lesson *Make a Simple Table*. You can also see the LaTeX files provided on the course Handout page for §2.1 Group Work.

Exercise. A variant of Exercise 2.1.101. Truth Table (§2.1) and Logical Equivalence (§2.2).

Let P , Q , and R be statements.

a. Construct a truth table for $P \implies (Q \vee R)$ and $(P \wedge (\sim Q)) \implies R$. §2.1

If one big truth table becomes too wide to fit on the paper, then you can just make 2 truth tables.

Cut this one red line out and then put your truth table(s) here.

b. Are $P \implies (Q \vee R)$ and $(P \wedge (\sim Q)) \implies R$ logically equivalent, i.e., phrased using notation: §2.2
is $[P \implies (Q \vee R)] \equiv [(P \wedge (\sim Q)) \implies R]$? Justify your answer (using complete sentences).