

Math 171 Homework 7 (half weight)

Due Friday May 20, 2016 by 4 pm

Please remember to write down your name and Stanford ID number, and to staple your solutions. Solutions are due to the Course Assistant, Alex Zamorzaev, in his office, 380-380M (either hand your solutions directly to him or leave the solutions under his door).

Book problems: Solve Johnsonbaugh and Pfaffenberger, problems 45.2, 45.5, 45.7ab, 46.2, 46.3, 46.5

Non-book problems:

1. Let X be any two element set, for instance $\{1, 2\}$, endowed with the discrete metric. Prove that a metric space M is connected if and only if the only continuous functions $f : M \rightarrow X$ are constant.