

COMPUTER SCIENCE 20, SPRING 2012
DISCRETE MATHEMATICS FOR COMPUTER SCIENCE

Class #13 (Strong Induction)

Homework, due in hard copy Wednesday 2/29/2012 at 10:10am

Please write your TF's name on your homework, and list the names of any students with whom you collaborated.

1. Suppose you are given $x \in \mathbb{R}$ such that $x + \frac{1}{x}$ is an integer. Use Strong Induction to show that $x^n + \frac{1}{x^n}$ is an integer for all $n \in \mathbb{N}$.