

COMPUTER SCIENCE 20, SPRING 2012
DISCRETE MATHEMATICS FOR COMPUTER SCIENCE

Class #11 (Uncountability)

Homework, due in hard copy Friday 2/24/2012 at 10:10am

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

1. Show that if A and B are countable, then $A \times B$ is countable. Drawing a picture may be helpful.
2. Use question 1 to show that \mathbb{Q} , the set of rational numbers, is countable.