CSE 312: Foundations of Computing II

QuickCheck: Combinatorics (due Thursday, April 5)

Name:

0. Apples & Baskets & Pears

Suppose you have 13 (indistinguishable) apples and 5 (distinguishable) baskets. How many ways are there to put all apples into the baskets...

(a) with at least two apples and at most three in each basket?

Now suppose you also have 7 (indistinguishable) pears. How many ways are there to put all apples and all pears into the baskets. . .

(b) with at least one apple and one pear in each basket?

(c) with at most three fruits in each basket?