



Problem of the Week

Problem D

Pick a Box, Any Box

A room contains 150 boxes. The boxes are identical except for colour. Each box contains a card which has one of three messages printed on it. In 78 of the boxes the card says “No Prize”. In 66 of the boxes the card says “Winner \$20”. And in 6 of the boxes the card says “Winner \$100”.

Contestants have been assigned a number corresponding to when they will make their selection. On a turn, each contestant gets to randomly choose 2 boxes. Once a box is chosen it is removed from the room.

You are the second contestant. What is the probability that you will select at least one of the boxes containing a \$100 prize?

