

## CS 223: In class warm-up, first lecture.

After we go to lunch one day, I suggest to you the following method to determine who pays. I pull three six-sided dice from my pocket. These dice are not the standard dice, but have the following numbers on their faces:

- Die A: 1,1,6,6,8,8
- Die B: 2,2,4,4,9,9
- Die C: 3,3,5,5,7,7

The dice are fair, so each side comes up with equal probability. I explain that we will each pick up one of the dice. We will then each roll our die, and the one who rolls the lowest number loses and will buy lunch. Since I would not want to take advantage of you, I naturally offer you the first choice of the dice.

What die will you choose, and what do you think of the game?