

**Problem 8.19** Suppose a player has one red die and one white die. How many outcomes are possible in the random experiment of tossing the two dice? Suppose the dice are indistinguishable, how many outcomes are possible?

**Solution**

The number of possible outcomes is  $6 \times 6 = 36$ , if distinguishable.

If the die are indistinguishable then the outcomes are

(11) (12)...(16)

(22)(23)...(26)

(33)(34)...(36)

(44)(45)(46)

(55)(56)

(66)

And the number of possible outcomes are 21.