The Pala Casino in California deals Card Craps using a red die numbered \{2, 2, 2, 5, 5, 5\} and a blue die numbered \{3, 3, 3, 4, 4, 4\}. Two cards from a special 36-card deck, which contains one card bearing each of the 36 ways in which two dice can land when rolled, are dealt: one each face down to a red space and a blue space. When the dice are rolled, the higher number determines which of the cards is flipped over.

A moment's reflection reveals that Pala's blue die is unnecessary. The card selection process can be streamlined by looking only at the red die:

If the red die shows a 2, turn over the blue card.
If the red die shows a 5, turn over the red card.

While this is certainly convenient for Pala's craps dealers, this talk will determine how many ways there are to renumber the red and blue dice so that the following criteria are met:

1. Only the numbers 1–6 are used.
2. No ties are possible.
3. Each die has a 50% chance of bearing the higher number when thrown.
4. Both dice need to be consulted on at least some rolls.

Implications: It's curious, though certainly understandable from gameplay considerations, that the blue die does not matter in Pala's version of card craps. The quest to devise nonstandard dice that both matter is an interesting exercise in the mathematics of game design.

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