

[nex2] Pick the winning die!

The six faces of four dice A, B, C, D have these numbers on them:

A	1 1 5 5 5 5
B	4 4 4 4 4 4
C	3 3 3 3 7 7
D	2 2 2 6 6 6

You and your opponent each pick one die to use throughout the game. In each round you both roll, and the high number wins. Which is the best die to have? Should you pick first or let your opponent pick first? What is your probability of winning? Give a detailed explanation.

Solution: