

## de Méré's Problem

“I used to bet even money that I would get at least one 6 in four rolls of a fair die. The probability of this is 4 times the probability of getting a 6 in a single die, i.e.,  $\mathbf{4/6 = 2/3}$ ; clearly I had an advantage and indeed I was making money. Now I bet even money that within 24 rolls of two dice I get at least one double 6. This has the same advantage ( $\mathbf{24/6^2 = 2/3}$ ), but now I am losing money. Why?”