

Re: A card game probability

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 - *Date:* 27 Jan 2007 15:30:55 -0800
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On Jan 27, 1:16 pm, "Faton Berisha" <fberia...@xxxxxxxxxxxx> wrote:

On Jan 27, 2:09 am, matt271829-n...@xxxxxxxxxxxx wrote:

I don't quite follow this. I'm guessing that "bar" signifies the complement, so "bar p_n " means the probability of *not* getting the first match at card n . Is that right? Not exactly. Here bar p_n is just a notation. I explained what

precisely it means.

If it troubles you, just denote it by another symbol, say q_n .

So if $n = 1$ should we have bar $p_n = 12/13$? I don't see how to get to that. If you substitute $n=1$, that's exactly what you'll get: $\bar{p}_1 = 12/13$.

(See the computation in my previous message.)

What does $\text{binom}\{n-1\}i$ mean? Initially I thought it might mean " $n-1$ choose i " but that seems not to work. Yes, it means $\{n-1\}$ chose i , and yes it does work.

And what does "A" signify? Denote by A an event. Then \bar{A} is the complement of A .

Denote by $\text{Pr}(A | B)$ the conditional probability of an event A given the occurrence of event B .

Denote by A_n : The card flipped in the n -th trial matches its pair. Then,

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$$\Pr(\bar{A}_n \mid \bar{A}_1 \bar{A}_2 \dots \bar{A}_{n-1})$$

is the probability of not having a match in the n -th trial, given that no match occurred in previous trials; i.e., the probability of not having a match after n trials given the fact that no match occurred in $n-1$ first trials.

$p_n = 1 - \prod_{i=1}^n \bar{p}_i$. This equation does not make a whole lot of sense as written. I'm

guessing that