6. Exercise: Use counting to calculate probabilities

Exercises due Feb 19, 2020 05:29 IST *Completed*

Exercise: Use counting to calculate probabilities

2.0/2.0 points (graded)

You are given the set of letters $\{A, B, C, D, E\}$. What is the probability that in a random five-letter string (in which each letter appears exactly once, and with all such strings equally likely) the letters A and B are next to each other? The answer to a previous exercise may also be useful here. (In this and subsequent questions, your answer should be a number. Do not enter '!' or combinations in your answer.)

48/120 ✔ **Answer:** 0.4

Solution:

From the previous exercise, the event of interest has 48 elements. The sample space has $5! = 120$ elements. Thus, the desired probability is $48/120 = 2/5 = 0.4$.

Submit You have used 3 of 3 attempts

Answers are displayed within the problem

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? is this graded correctly?

I assume that AB and BA are distinct entities. And that ABCDE ≠ EDCBA. If those are the case, I'm at a loss.

Do not get confused with dice example from previous video

I was initially confused because I applied the dice example from previous video, but read the exercise cle...

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