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LE1.1

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LE1.1.1: Quantifying Information

4/4 points (ungraded)  
For the problems below enter your responses as numeric values. You may find it helpful to use the built-in calculator -- click the icon in the lower righthand corner of the page. It supports the function "log2(...)" which computes the log-base-2 of its argument.

A) You're given a standard deck of 52 playing cards that you start to turn face up, card by card. So far as you know, they're in completely random order.

- How many new bits of information do you get when the first card is flipped over and you learn exactly which card it is?

Information (in bits):  ✓

- The fifth card?

Information (in bits):  ✓

- The last card?

Information (in bits):  ✓

B) Z is an unknown N-bit binary number ( $N > 3$ ). You are told that the first three bits of Z are 011. How many bits of information about Z have you been given?

Information (in bits):  ✓

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<a href="#">On part B I had no idea how to approach this question. So i saw this part of the question "You are told that the first three bits of Z are 011...</a>	
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<a href="#">I'm not getting this and I've studied, with great success, related matters. Rather than ask for explanations here, could you please suggest ...</a>	
✓ <a href="#">larger Context</a>	5
<a href="#">Can you tell me why this is important in the larger context of building a 32 bit computer. The instructor does not seem to convey the big p...</a>	
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<a href="#">I have a question about the clarity of the question. After revealing the answers, I see that the questions for part a) were asking for inform...</a>	
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<a href="#">This question is confusing: It should be if we know exactly what the next card is, how many information we already learned. In lecture, if ...</a>	
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<a href="#">Although the mechanics thru the calculations seems straightforward,,just replacing values into the formula <math>H(p_n)=\log_2(1/p_n)</math> we will g...</a>	
💬 <a href="#">[STAFF] Grader Tolerance is Low</a>	2
<a href="#">The grader tolerance needs to be narrowed down a bit for this question. For question 2. mv answer was wrong and I still got a green tick. ...</a>	

Calculator

- 

Very interesting.

Very interesting, but I got no one of the four problems correct. After clicking Show Answers I agree with the explanations given.

1
- 

the number of bits

in the example three; roll of two dice at the information content, we got 5.17 bits. so, I want to know how we come about that number of b...

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