Alexander Garcia
21 April 2017

1. Question 1

   (a) When rolling the Zocchihedron the first time, you are guaranteed to get a number. The probability of rolling the same number in any of the next four rolls is $\frac{1}{100}$. The sum of these probabilities is $\frac{4}{100} = \frac{1}{25} = 0.04$

   (b) A fair die will have exactly $\frac{1}{100}$ chance of rolling a given number. Using the same logic as in part (a), we must solve for the number of rolls, rather than the probability.
   $\frac{n}{100} = 0.3$
   $n = 30$ rolls

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2. Question 2

   (a)

   (b)

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21 April 2017

3. Question 3

   (a)

   (b)

   (c)

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21 April 2017

4. Question 4

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5. Question 5

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21 April 2017

6. Question 6

   (a)

   (b)