

Mathematics 1550H – Introduction to probability

TRENT UNIVERSITY, Summer 2017

Assignment #3

The Mathematical Inquisition Strikes Again!

Due Wednesday, 12 July, 2017.

In the Kafka-esque dystopian future in which mathematical scientists have taken over the world, you are condemned* to working out the base 7 expansion of π by hand unless you can correctly answer the following question:

If you were to pick an answer to this question at random from among the choices below, what is the probability that it would be correct?

- (a) 0.2
- (b) $1/\pi$
- (c) $1/5$
- (d) 0.0
- (e) $4/10$

1. Explain! [5]

While serving your sentence of computing the base 7 expansion of π by hand, your appeal goes forward. The court decides it will reduce your sentence to time served if you can answer the following question correctly:

How many letters are there in the answer to this question?

2. Well? [5]

Remember: no one expects the Mathematical Inquisition!

* For writing that $\frac{1}{2} + \frac{1}{3} = \frac{1+1}{2+3} = \frac{2}{5}$. At least you didn't divide by 0 ... :-)