

Mathematics 1550H – Introduction to probability

TRENT UNIVERSITY, Winter 2018

Assignment #2

Tossing the coin away...

Due on Friday, 26 January.

Consider the following experiment: Toss a fair coin repeatedly until a head immediately followed by a tail come up. For example, the shortest possible run of the experiment would be the outcome HT, the next shortest would be the outcomes HHT or THT, and so on.

1. What is the sample space for this experiment? [2]
2. What is the probability function for this experiment? [4]
3. What is the probability that at least five tosses will occur during this experiment? [4]

Some computer error messages in haiku

Three things are certain:
Death, taxes, and lost data.
Guess which has occurred.

The code was willing,
It considered your request,
But the chips were weak.

Printer not ready.
Could be a fatal error.
Have a pen handy?

Chaos reigns within.
Reflect, repent, and reboot.
Order shall return.

wind catches lily
scatt'ring petals to the wind:
segmentation fault

The Tao that is seen
Is not the true Tao, until
You bring fresh toner.

You step in the stream,
but the water has moved on.
This page is not here.

No keyboard present
Hit F1 to continue
Zen engineering?

Serious error.
All shortcuts have disappeared
Screen. Mind. Both are blank.

Taken from the entries to a Salon magazine contest.