

Mathematics 1550H – Introduction to probability

TRENT UNIVERSITY, Winter 2017

Assignment #e

Equation limericks

Due on Tuesday, 28 February, 2017.

A *limerick* is a little poem with an *aabba* rhyme scheme [the first, second, and fifth lines rhyme with each other, and the third and fourth rhyme with each other], nine syllables in each of the first, second, and fifth lines, and six syllables in each of the third and fourth lines. Limericks are traditionally humorous and in English the language is frequently mangled a bit to make things work. Here is a well-known (in *some* circles :-) example that touches on physics:

There was a young lady named Bright,
Who traveled much faster than light.
She started one day
In the relative way,
And returned on the previous night.

It is not entirely clear who wrote this one: it has been variously credited to Anonymous, Helen Barton Tuttle, and A. H. Reginald Fuller.

A rather uncommon subtype of the limerick is the equation limerick, in which the limerick describes an equation. A simple example was given with Assignment #2. Here is another example, this one involving calculus:

$$\int_1^{\sqrt[3]{3}} t^2 dt \cdot \cos\left(\frac{3\pi}{9}\right) = \log(\sqrt[3]{e})$$

The integral tee squared dee tee
From one to the cube root of three
Times the cosine
Of three pi over nine
Is the log of the cube root of e.

Posted to `sci.math` by Gerald A. Edgar in 1992. [*Slightly edited.*]

Your task, should you choose to accept it is to:

1. Write an *original* equation limerick. The equation must be correct! [10]
With a bonus if your equation involves probability in a non-trivial way. [1]

NOTE: This is an extra assignment which would give you a larger pool from which the best ten are chosen to count towards the final mark. Really, though, it's to have something fun to do over Reading Week instead of just studying for the midterm ... :-)