

## Mathematics 2200H – Mathematical Reasoning

TRENT UNIVERSITY, Fall 2015

### Assignment # $\tau$

Due on Monday, 2 November, 2015.

#### Equation limericks

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 :- ) 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. Here is an example:

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

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]

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 just to have something fun to do over Reading Week! :-)

ANOTHER NOTE:  $\tau = 2\pi$ , just in case you were wondering.