

## Mathematics 1110H – Calculus I: Limits, Derivatives, and Integrals

TRENT UNIVERSITY, Fall 2018

### Assignment #2e

#### Equation Limericks

Due on Monday, 29 October.

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], which usually has 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 credited to Anonymous, Helen Barton Tuttle, and A. H. Reginald Fuller, and perhaps more besides.

A rather uncommon subtype of the limerick is the equation limerick, in which the limerick describes an equation. Here is a simple example:

$$\frac{12 + 144 + 20 + 3\sqrt{4}}{7} + 5 \cdot 11 = 9^2 + 0$$

A dozen, a gross, and a score,  
Plus three times the square root of four,  
Divided by seven,  
Plus five times eleven,  
Is nine squared and a not a bit more!

Posted to `sci.math` by Ralph Ray Craig c. 1992.

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 c. 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]