Mathematics 1101Y - Calculus I: functions and calculus of one variable

TRENT UNIVERSITY, 2013-2014

Assignment $\#\pi$ Equation Limericks

Due on Friday, 11 January, 2014.

A limerick is a poem with five lines. The first, second, and fifth lines should have nine syllables each and rhyme with each other, and the third and fourth should have six syllables each and rhyme with each other. It is common to mangle spelling, pronunciation, and grammar when composing limericks in English. A well-known example of a limerick, relating to physics, is the following:

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.

By Hellen Barton Tuttle, or A.H. Reginald Buller, F.R.S., or Anonymous ...

An obscure subtype of the limerick is the equation limerick, which states an equation. Here are some examples:

$$(12+144+20+3\cdot\sqrt{4})/7+5\cdot11=9^2$$

a dozen, a gross, plus a score

plus three times the square root of four

divided by seven

plus five times eleven

is nine squared (and not a bit more)

Posted to sci.math by Rajeev Krishnamoorthy in 1992.

$$\int_{1}^{3^{1/3}} t^{2} dt \cdot \cos\left(\frac{3\pi}{9}\right) = \log\left(\sqrt[3]{e}\right)$$

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.)

$$\ln\left(e^4\right)\left(\sqrt{1024}\right) + 6(12) - 8(23) = 16$$

The lon of e to the four

Times the square root of ten twenty-four

Adding six dozen please

Minus eight twenty-three's

Is sixteen, case is closed, shut the door.

This one is by Chris Cole, a student in the 2002-2003 edition of MATH 110 (now MATH 1100Y/1101Y).

1. Write an *original* equation limerick. The equation must be correct! [10]