Mathematics 3810H – Ancient and classical mathematics

Assignment #5
Due on Friday, 27 November, 2009.

Circular reasoning?

1. Write a short essay about the Antikythera mechanism, including (brief!) descriptions of the object, its discovery, what it is believed to have been intended to do, and what it reveals about the mathematical knowledge of its makers. *[10]*

2. Write a brief account of the chord function used in Greek and Hellenistic trigonometry, including its definition, how it relates to the trigonometric functions used today, and its applications. *[10]*

NOTE: Neither answer should exceed 500 words or so . . .

Unified Field Theory

In the beginning there was Aristotle,
And objects at rest tended to remain at rest,
And objects in motion tended to come to rest,
And soon everything was at rest,
And God saw that it was boring.

Then God created Newton,
And objects at rest tended to remain at rest,
But objects in motion tended to remain in motion,
And energy was conserved and momentum was conserved
        and matter was conserved,
And God saw that it was conservative.

Then God created Einstein,
And everything was relative,
And fast things became short,
And straight things became curved,
And the universe was filled with inertial frames,
And God saw that it was relatively general,
        but some of it was especially relative.

Then God created Bohr,
And there was principle,
And the principle was quantum,
And all things were quantified,
But some things were still relative,
And God saw that it was confusing.

Then God was going to create Furgeson,
And Furgeson would have unified,
And he would have fielded a theory,
And all would have been one,
But it was the seventh day,
And God rested,
And objects at rest tend to remain at rest.

Tim Joseph