Proofems?
Due* just before midnight on Monday, 26 February.

Poems describing mathematical results are a tad bit uncommon. However, at least one very distinguished poet has dabbled in the genre, namely the Romantic poet and literary critic Samuel Taylor Coleridge (1772-1834), probably best known for his poems *Kubla Khan* and *The Rime of the Ancient Mariner*. His poem *A Mathematical Problem*, which is about the first proposition in Euclid's *Elements*, appeared in a letter to his brother George in 1791, but did not appear in print until 1834.

1. Write an original poem stating a mathematical fact and giving its proof. *[10]*

Here is an example of such a poem, written by a Trent student some years ago, that is about a another proposition in Euclid's work:

"Euclid I-6"

Given a triangle,
  Points A, B, C,
Where two of the angles
  Completely agree,
Are the opposite sides
  In agreement aussi?
Assume for the moment
  That this isn't true,
Angles B and C equal,
  But their sides don't too,
Then one must be bigger,
  – AB will do.
From AB cut DB,
  The same as AC,
Then connect C and D,
  To make CD – and see,
That by Euclid I-4
  There's a congruency!
ABC and DBC,
  Cannot be the same,
Euclid's fifth notion
  Is the thing to blame.
Thus AB and AC,
  Are proven the same!

Kelly Moncrief [MATH 380, 2002-2003.]

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* You should submit your solutions via Blackboard's Assignments module, preferably as a single pdf. If submission via Blackboard fails, please submit your work to your instructor by email or on paper. **This is an extra assignment which, should you choose to do it, will go into the pool from which the best ten are chosen.**