

Problem 12
The Feuerbach Point lies on the Cevian Circle of the Yff Center of Conguence

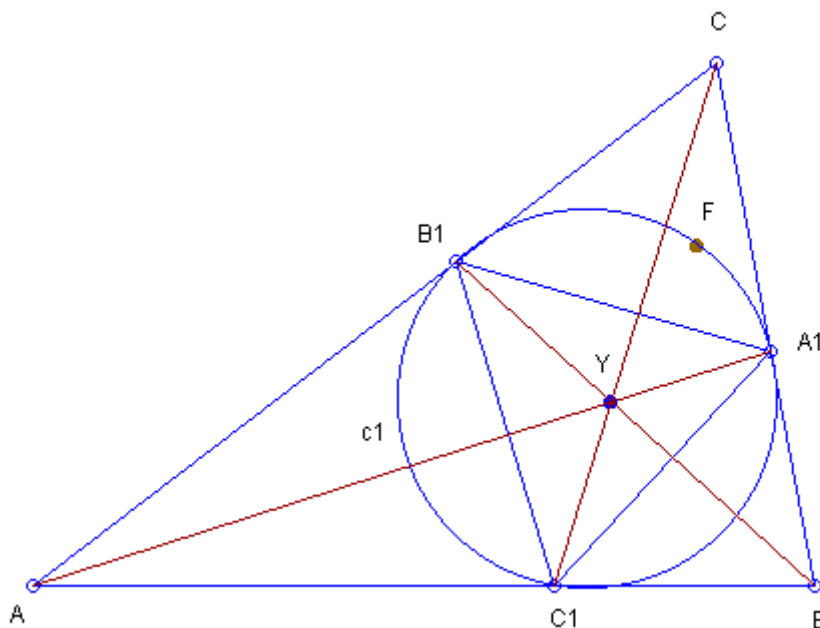
Publication Date: February 20, 2008

Prove the following computer-generated theorem:

THEOREM. The Feuerbach Point lies on the Cevian Circle of the Yff Center of Conguence.

The reader may find the definitions in [1-4].

See the Figure:



Y - Yff Center of Conguence;

$A_1B_1C_1$ - Cevian Triangle of the Yff Center of Conguence;

circle c_1 - Cevian Circle of the Yff Center of Conguence = Circumcircle of triangle $A_1B_1C_1$;

The Feuerbach Point F lies on the Cevian Circle of the Yff Center of Conguence.

References

1. Quim Castellsaguer, The Triangles Web,
<http://www.xtec.es/~qcastell/ttw/ttweng/portada.html>
2. D. Dekov, Computer-Generated Encyclopedia of Euclidean Geometry, First Edition, 2006, available at the Web: <http://www.dekovsoft.com/e1/>.
3. D. Dekov, papers in this journal, 2006, 2007, 2008.
4. Eric W. Weisstein, MathWorld - A Wolfram Web Resource.
<http://mathworld.wolfram.com/>