

Problem 5.

The Feuerbach Point lies on the Parry Circle of the Intouch Triangle

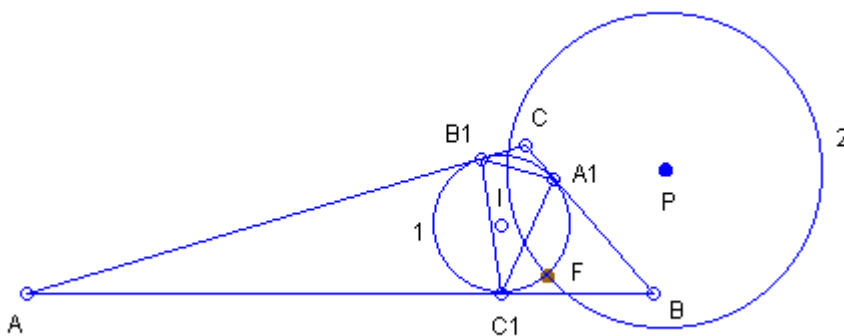
Publication Date: February 15, 2008

Prove the following computer-generated theorem:

THEOREM. The Feuerbach Point lies on the Parry Circle of the Intouch Triangle.

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

The Parry circle of a triangle is the circle passing through the Centroid, the First Isodynamic Point and the Second Isodynamic Point of the triangle (see [1-4]). See the Figure:



I - Incenter;

circle 1 - Incircle;

$A_1B_1C_1$ - Intouch Triangle;

P - Center of the Parry Circle of the Intouch Triangle;

circle 2 - Parry Circle of the Intouch Triangle;

The Feuerbach Point F lies on the Parry Circle of the Intouch Triangle

References

1. Quim Castellsaguer, The Triangles Web,
<http://www.xtec.es/~qcastell/tw/ttweng/portada.html>
2. D. Dekov, Computer-Generated Encyclopedia of Euclidean Geometry, First Edition,
2006, available at the Web: <http://www.dekovsoft.com/>.

3. D. Dekov, papers in this journal, 2006, 2007, 2008.
4. Eric W. Weisstein, MathWorld - A Wolfram Web Resource.
<http://mathworld.wolfram.com/>