

Problem 18

The Feuerbach Point is the Inverse of the Incenter in the Nine-Point Circle of the Fuhrmann Triangle

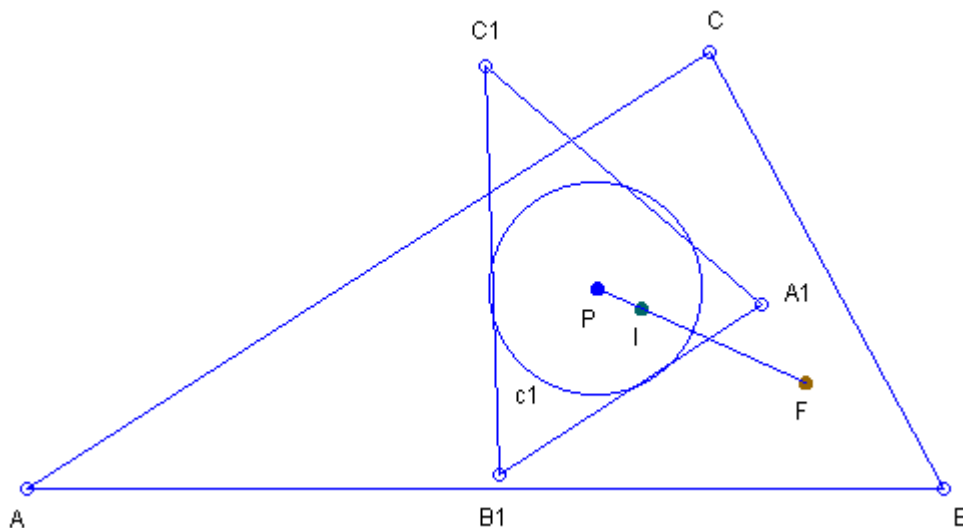
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Prove the following computer-generated theorem:

THEOREM. The Feuerbach Point is the Inverse of the Incenter in the Nine-Point Circle of the Fuhrmann Triangle.

The reader may find the definitions in [1-4]. For the definition of the Fuhrmann Triangle see [2, Definitions, Triangles, Fuhrmann Triangle].

See the Figure:



I - Incenter;

$A_1B_1C_1$ - Fuhrmann Triangle;

circle c_1 - Nine-Point Circle of the Fuhrmann Triangle;

P - Center of the Nine-Point Circle of the Fuhrmann Triangle;

The Feuerbach Point F is the Inverse of the Incenter in the Nine-Point Circle of the Fuhrmann Triangle.

References

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