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PROOF OF AN INEQUALITY CONJECTURE FOR A POINT IN THE PLANE OF A TRIANGLE

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Abstract. In [1] Jian Liu established a novel inequality about an arbitrary point in the plane of a triangle. He also put forward a conjecture about a parameterized version of this inequality. In this paper, we proceed to give a proof of this inequality facilitated by a combination of computer-aided calculations and traditional planar geometry. This proof demonstrates again the strengths of the real algebra methodology develped over time by Ritt, Wu, Yang, Yang, Xia, et. al.

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