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ON INEQUALITY $R_p < R$ OF THE PEDAL TRIANGLE

JIAN LIU

Abstract. In this paper we give a simple proof of the pedal triangle inequality $R_p < R$, where R is the circumradius of a triangle and R_p is the circumradius of the pedal triangle of an interior point with respect to this triangle. We also establish a stronger result and a refinement of inequality $R_p < R$. Some related interesting conjectures checked by the computer are put forward.

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