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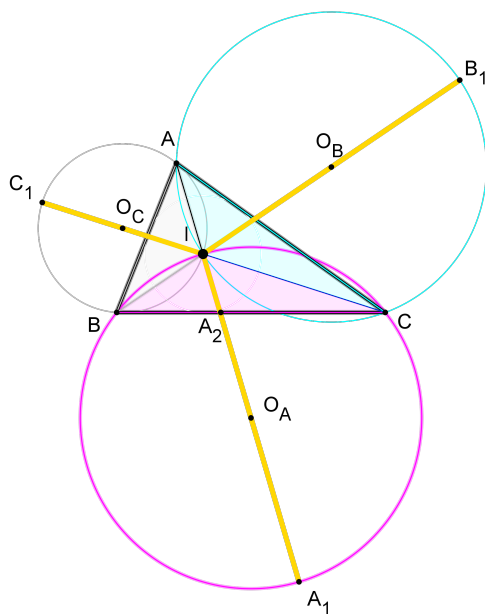
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This month's "free sample" is:

4268. *Proposed by Mihaela Berindeanu.*

Let I be the incenter of the acute triangle ABC , and let the triangle's internal angle bisectors intersect the circles IBC , ICA , and IAB again at A_1 , B_1 , and C_1 , respectively. Show that $\vec{IA_1} + \vec{IB_1} + \vec{IC_1} = \vec{0}$ if and only if $\triangle ABC$ is equilateral.



4268. *Proposé par Mihaela Berindeanu.*

Soit I le centre du cercle inscrit du triangle aigu ABC et supposer que ses bissectrices internes d'angles intersectent les cercles IBC , ICA et IAB une seconde fois en A_1 , B_1 et C_1 respectivement. Démontrer que $\vec{IA_1} + \vec{IB_1} + \vec{IC_1} = \vec{0}$ si et seulement si $\triangle ABC$ est équilatéral.

