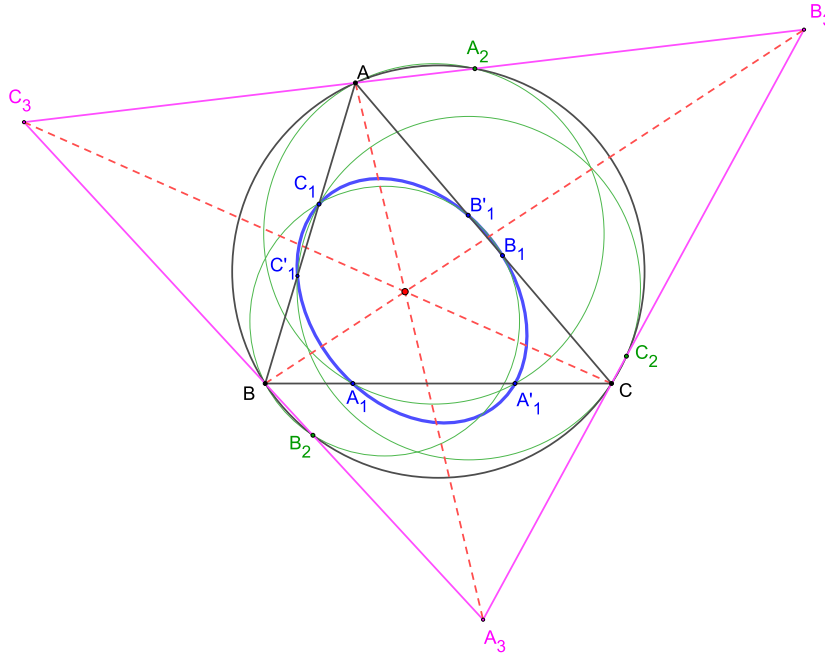


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Theorem. Consider $\triangle ABC$ and six points $A_1, A'_1 \in BC$, $B_1, B'_1 \in CA$, $C_1, C'_1 \in AB$ that do not coincide with A, B, C . Let A_2 be the point, other than A , that circles $(AA_1A'_1)$ and (ABC) intersect and define B_2, C_2 cyclically. Let $A_3 = BB_2 \cap CC_2$, $B_3 = CC_2 \cap AA_2$, $C_3 = AA_2 \cap BB_2$.

Then $\triangle A_3B_3C_3$ and $\triangle ABC$ are perspective if and only if six points $A_1, A'_1, B_1, B'_1, C_1, C'_1$ lie on the same conic.



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