TOUCHING CONICS GENERATED BY FEUERBACH CONFIGURATIONS AND HOMOTHETY

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Abstract. The following assertion gives an interesting relation between the circumcircle of a triangle and the circle which is inscribed in one of its angles: A circle ω with centre I touches the sides AB and AC of \triangle ABC intersecting the side BC in points X and Y. If Z is the common point of the line through A parallel to BC and the line through I perpendicular to BC, then the circumcircles of \triangle ABC and \triangle XYZ are tangent. The present paper is dedicated to a generalization of that assertion concerning suitably constructed inscribed conics in an angle of a given triangle and a kind of its circumscribed curves.

Key words: Triangle, conic, common points.

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