## عنوان مقاله:

A TAXICAB VERSION OF A TRIANGLE S APOLLONIUS CIRCLE

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خلاصه مقاله:
One of the most famous problems of classical geometry is the Apollonius problem asks construction of a circle which is tangent to three given objects. These objects are usually taken as points, lines, and circles. This well known problem was posed by Apollonius of Perga ( about 262-190 B.C.) who was a Greek mathematician known as the great geometer of ancient times after Euclid and Archimedes. The Apollonius problem can be reduced speci cally to the question Is there the circle that touches all three excircles of given triangle and encompasses them when all three objects are circles. In literature, altough there are a lot of works on the solution of this question in the Euclidean plane, there is not the work on this question in different metric geometries. In this paper, we give that the conditions of .existence of Apollonius taxicab circle for any triangle

كلمات كليدى:<br>Taxicab distance, Distance Functions, Taxicab geometry, Apollonius circle



