The Pythagorean theorem and area formula for triangles on the plane with generalized absolute value metric

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ABSTRACT.

In this paper, we first give the Pythagorean theorem on the plane with generalized absolute value metric and show that the converse of the Pythagorean theorem is not true in this plane. Secondly, we give necessary and sufficient conditions for a triangle in this plane to have a right angle. Finally, we give a formula for the area of a triangle on this plane.

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Received: 05.09.2009; In revised form: 10.02.2011; Accepted: 15.02.2011 2000 Mathematics Subject Classification. 51K05, 51K99. Key words and phrases. Distance, metric, Pythagorean theorem.