Metric relations in the plane obtained by using complex numbers

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Abstract.

The main purpose of this paper is to obtain some important metric relations in the Euclidean plane by using complex numbers. In the first Section we prove the Lagrange's formula and we derive a generalization of the well-known Stewart's relation. Section 2 is devoted to Zarantonello's inequality and to its connection to the problem of finding the group of plane isometries.

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Received: 31.03.2010; In revised form: 13.05.2010; Accepted: 15.08.2010. 2000 Mathematics Subject Classification. 00A05, 00A07, 30A99, 97U40. Key words and phrases. Lagrange's formula, Stewart's relation, Zarantonello's inequality, plane isometry.