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Laine, A.D.

Graphical solution of the monic quadratic equation with complex coefficients.

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Summary: There are many geometrical approaches to the solution of the quadratic equation with real coefficients. In this article it is shown that the monic quadratic equation with complex coefficients can also be solved graphically, by the intersection of two hyperbolas; one hyperbola being derived from the real part of the quadratic equation and one from the imaginary part. Both hyperbolas are of relatively simple form. Special solutions correspond to one or both of the hyperbolas being degenerate. This article is of potential interest to secondary school students with some exposure to complex numbers and first year university students. (ERIC)

Classification: H30 F50

Keywords: quadratic equations; complex coefficients