

ZMATH 2016f.01101

Bardell, Nicholas S.

Some comments on the use of de Moivre's theorem to solve quadratic equations with real or complex coefficients.

Aust. Sr. Math. J. 28, No. 2, 7-14 (2014).

Summary: This paper describes how a simple application of de Moivre's theorem may be used to not only find the roots of a quadratic equation with real or generally complex coefficients but also to pinpoint their location in the Argand plane. This approach is much simpler than the comprehensive analysis presented by the author [ibid. 26, No. 2, 6–20 (2012; ME 2013d.00569); ibid. 28, No. 1, 7–28 (2014; ME 2016f.01100)], but it does not make the full visual connection between the Cartesian plane and the Argand plane that Bardell's three dimensional surfaces illustrated so well. (ERIC)

Classification: H30 F50

Keywords: de Moivre's theorem; quadratic equations; complex coefficients