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Harding, Ansie; Engelbrecht, Johann

Sibling curves and complex roots 2: looking ahead.

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Summary: This paper, the second of a two part article, expands on an idea that appeared in literature in the 1950s to show that by restricting the domain to those complex numbers that map onto real numbers, representations of functions other than the ones in the real plane are obtained. In other words, the well-known curves in the real plane only depict part of a bigger whole. This expanded representation brings new insight into visualising complex roots. The suggestion is that this new approach be introduced to students firstly through relating the path in history and secondly by imparting the visual presentation as exposed in the paper to offer a richer teaching and learning approach to the topic. Furthermore this approach provides a new way of employing technology to visualise concepts and curves that

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Keywords: history of mathematics; fundamental theorem of algebra; graphical methods; visualization; graph of a function; polynomials; complex functions; quadratic functions; cubic functions; quartic polynomials; function theory; exponential functions; trigonometric functions; hyperbolic functions; circles; graphical representations

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