Stephan Ramon Garcia* (stephan.garcia@pomona.edu), Department of Mathematics, Pomona College, 610 N College Ave, Claremont, CA 91711. If you believe in real numbers and matrices, then you believe in complex arithmetic!

The introduction of the complex number system sets the tone for your entire complex-variables course. Important questions abound. Should complex numbers be presented as handed down by the gods? Is $i$ just a symbol with magical properties? Should the properties of complex numbers be derived from more primitive principles? Many instructors are familiar with a matrix-based approach to $\mathbb{C}$. We push this perspective to its logical extreme and demonstrate that almost all properties of complex arithmetic follow from elementary linear algebra. (Received August 18, 2016)