962-T1-544 Masato Kimura* (kimura@hood.edu), Prof Masato Kimura, Department of Math and Computer Science, Hood College, Frederick, MD 21701-8575. Complex numbers. Simple geometry.

Preliminary report.

Early in their academic careers, undergraduate math majors are exposed to the geometry of complex numbers. Demoivre's Law, roots of unity, and complex numbers as vectors are all topics in Freshman Calculus. What is not as well-known, however, is the power of using complex numbers in geometric computations and in proving theorems in transformational geometry. In this presentation, we'll illustrate how one can incorporate complex numbers in an upper-division geometry course, one focusing on transformational geometry. We present how complex numbers make several results simple to prove, and calculations easy. (Received September 15, 2000)