

1096-VK-840 **Thomas J Osler*** (osler@rowan.edu), Mathematics Department, Rowan University, Glassboro, NJ 08028. *A fresh look at some very old formulas for pi.*

Vieta's product for $2/\pi$ has factors that are nested radicals. The Wallis product for $2/\pi$ has factors that are rational numbers. Brouncker gave an infinite sequence of continued fractions for $4/\pi$. By summarizing some recently published results in this expository paper, we show that these seemingly unrelated results are connected. We give a general formula in which the products of Vieta and Wallis are special cases. We give another general formula of which the results of Brouncker and Wallis are special cases. Both formulas allow us to "morph" from one result to the other. (Received September 10, 2013)