We show that both Brouncker’s continued fraction for pi and the product of Wallis (both from 1656) are special cases of a more general formula of the form $4/\pi = BW(n)$, where $n = 0, 1, 2, 3, \text{etc.}$ When $n = 0$ the expression $4/\pi = BW(0)$ is the original continued fraction of Brouncker. As $n$ approaches infinity, the formula becomes the original product of Wallis. When the expressions $BW(1)$, $BW(2)$, $BW(3)$, etc. are listed, we see Brouncker’s continued fraction gradually “morph” into Wallis’s product.

Similar results are shown for other continued fractions similar to Brouncker’s such as the one given recently by Lange [1]. We also discuss the observation of Stedall [2] that a large class of continued fractions for pi were known to both Wallis and Brouncker, but this fact seems to have been overlooked by modern mathematicians.
