Problem 6 (due Monday, November 22)

Let $a_1=3/2$ and $a_{n+1}=a_n^2-a_n+1$. Compute the sum \[
\frac{1}{a_1}+\frac{1}{a_2}+\frac{1}{a_3}+\ldots .\]

Two solutions were received: from Ashton Keith and Pluto Wang. Both solvers show that if $a_1=a>1$ then the infinite sum is equal to 1/(a-1). Pluto's solution is essentially the same as our original solution. Ashton's solution is based on the same idea, but used slightly differently, and some claims are not justified with sufficient rigor. For more details see the following link Solution.