In this talk, we will show how to explicitly compute the stable reduction of the modular curve, $X_0(625)$, at the prime $p = 5$. This example supports a slight variation of an earlier conjecture regarding $X_0(p^4)$ in the general case, which was based on $X_0(81)$. So we will conclude the talk with a statement of the revised conjecture, as well as a brief status report on its proof. (Received September 13, 2008)