For every integer $d > 1$, we may define the space of morphisms from $\mathbb{P}^1$ to itself of degree $d$; this space is parametrized by monomials of degree $d$, and is an affine open subset of $\mathbb{P}^{2d+1}$. It has an action by $\text{PGL}(2)$ induced by the conjugation action of $\text{PGL}(2)$ on $\mathbb{P}^1$. The quotient of the action parametrizes dynamical systems on $\mathbb{P}^1$ up to coordinate change. In this talk we prove that the quotient is rational for all $d$, generalizing previous results showing that when $d = 2$, the quotient is isomorphic to $\mathbb{A}^2$. (Received September 12, 2009)