A singular perturbation of a polynomial $P(z) \in \mathbb{C}[z]$ is a rational function of the form $f(z)=P(z)+\frac{\epsilon}{(z-\beta)^{e}}$, where $\beta$ is often taken to be a periodic and/or critical point for $P$. We investigate what one can say about the arithmetic complexity of the critical orbits of $f$ compared to those of $P$. (Received February 18, 2018)

