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Let $\phi : \mathbb{P}_1 \rightarrow \mathbb{P}_1$ be a endomorphism of degree $d \geq 2$ defined over a number field K . Let S be the set of places of bad reduction for ϕ , including the archimedean places, and $PrePer(\phi, K)$ be the set of K -rational preperiodic points of ϕ .

The present paper presents two main results. The first result is a bound for $|PrePer(\phi, K)|$ in terms of the number of places of bad reduction $|S|$ and the degree d of the endomorphism ϕ . This bound is *quadratic* in terms of d which is a significant improvement to all previous bound for $|PrePer(\phi, K)|$ in terms of d .

For the second result, if we assume that there is a K -rational periodic point of minimal period at least two then a bound for the cardinality of the set $PrePer(\phi, K)$ can be given which is *linear* in terms of d . (Received September 28, 2017)