

1125-VN-1301 **Chatchawan Panraksa*** (chatchawan.pan@mahidol.edu), 999 Phutthamonthon 4 Road, Salaya, Nakhonpath 73170, Thailand. *Parametrization of Four-Periodic Points of Rational Quadratic Functions.*

Let $\phi_c(x) = x^2 + c$ with c rational. We study points of period four, i.e., the points x such that $\phi_c(\phi_c(\phi_c(\phi_c(x)))) = x$. We show that the points form Galois conjugate pairs. Moreover, by using Groebner basis, we can parametrize the points of period four. We also discuss irreducible factors of polynomials where the roots are the points of period four. (Received September 16, 2016)