

1125-11-54

Ricardo Conceicao*, 300 North Washington Street, Glatfelter Hall, Campus Box 402, Gettysburg, PA 17325, and **Rodrigo Gondim** and **Miguel Rodriguez**. *On a Frobenius problem for polynomials.*

We extend the famous diophantine Frobenius problem to the setting of polynomials over a field k . Similar to the classical problem, we show that the $n = 2$ case of the Frobenius problem for polynomials is easy to solve. In addition, we translate a few results from the Frobenius problem over \mathbb{Z} to $k[t]$. When k is a finite field, we discuss some striking contrasts between the classical and the polynomial case, and mention a few ideas for future research. (Received June 27, 2016)