1056-11-171 Alejandra Alvarado* (devina21@hotmail.com), 2514 E. 23rd St., Tucson, AZ 85713. Arithmetic Progressions on Curves of Degree Five.

Let f be a degree five polynomial over the rationals. Consider the curve $y^2 = f(x)$. We will show that there is an infinite family of such curves which contain an arithmetic progression of length 12. (Received August 11, 2009)