1067-11-358 Alejandra Alvarado* (alvarado@math.arizona.edu), 617 N. Santa Rita Ave., Tucson, AZ 85721. Arithmetic Progressions in the y-coordinates of Certain Elliptic Curves.

We consider arithmetic progressions in the y-coordinate on the elliptic curve $y^2 = x^3 + k$ whose coefficients are rational. We investigate lengths four, five, and six. (Received August 26, 2010)