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Curves with high rank using Pell equations and Murty sums

Generalizing a result of Brown and Meyers, we will describe a fairly large family of curves whose rank is at least two, along with a subfamily, determined by the solvability of certain Pell equations, with rank at least three, and show how Ram Murty Sums can be used to find many curves in this family of rank eight, and some of even higher rank.