## Finding Number Sequences Using the Pascal Triangle and the Newton Binomial

Miranda, Karina (School: CROEM HS)

Together, the Pascal triangle and the Newton binomial, can predict sequences of numbers. Procedures will be performed with binomial, were the value of one of the variables will remain constant during four cases and then, another variable will be changed to be constant. The variables that are not constant will be aleatory numbers. These experiments are done with numbers that belong to the Pascal triangle using a calculator and a notebook. Results with sequences of numbers that are congruent with one of the rows in the Pascal triangle will be needed, if it is not the case, the procedure will be verified and corrected. Is expected a prediction of sequences of numbers during the experimentation. This investigation would help in the comprehension of math, binomial, and the Pascal triangle, as well as with programming and algorithms.