# DIVISIBILITY PATTERNS IN PASCAL'S TRIANGLE

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One of the most attractive patterns of numbers is the Pascal's triangle. It is an arithmetic triangle, which gives binomial coefficients of the form $(a + b)^n$. Properties of these values of coefficients have been discussed for long time, even Pascal himself listed out the properties. One of the clear observations is, for example, the coefficients are symmetric from both edges. Study of divisibility of this coefficient by some positive integers also important in many situations. The objective of the present study is to identify and formulate the properties satisfied by the Pascal's triangle in the point of divisibility of numbers. Formula to find the number of Pascal coefficients which are divisible by prime numbers is available in literature. Here we intend to find a formula which gives the number of entries divisible by four with respect to a specific row number.

*Keywords: Pascal Triangle, Divisibility pattern,*