

## Series "H154M" as a Unit Area of the Region between the Lines and Curves

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**Abstract :** This world events consciously or not realize everything has a pattern, until the events of the universe according to the Big Bang theory of the solar system which makes so regular in the rotation. The author would like to create a results curve area between the quadratic function  $y=kx^2$  and line  $y=ka^2$  using GeoGebra application version 4.2. This paper can provide a series that is no less interesting with Fourier series, so that will add new material about the series can be calculated with sigma notation. In addition, the ranks of the unique natural numbers of extensive changes in established areas. Finally, this paper provides analytical and geometric proof of the vast area in between the lines and curves that give the area is formed by  $y=ka^2$  dan kurva  $y=kx^2$ , x-axis, line  $x=\sqrt{a}$  and  $x=-\sqrt{a}$  make a series of numbers for  $k=1$  and  $a \in$  original numbers.  $\sum_{i=0}^n (4n\sqrt{n})/3 = 0 + 4/3 + (8\sqrt{2})/3 + 4\sqrt{3} + \dots + (4n\sqrt{n})/3$ . The author calls the series "H154M".

**Keywords :** sequence, series, sigma notation, application GeoGebra

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