

Binomials with exponent fractional III:

Following with what we leave back in article II of this topic, now I will try to calculate the factorials $(\frac{6}{5})!$, $(\frac{4}{5})!$, $(\frac{3}{5})!$, $(\frac{2}{5})!$, $(\frac{1}{5})!$

Using the modulated expression :

$$\Gamma(z+1) = \lim_{n \rightarrow \infty} \frac{n!.n^{z+1}}{(n+z+1).(n+z).(n+z-1) \dots (z+1)} = (z)!$$

$$\text{When } z = \frac{6}{5} \Rightarrow \lim_{n \rightarrow \infty} \frac{n!.n^{\frac{6}{5}+1}}{(n+6/5+1).(n+6/5).(n+6/5-1) \dots (6/5+1)}$$

where it is assumed that the larger the “n”, the expression it fits more to the actual or desired value .