

CONTINUATION “V” OF “BINOMIALS WITH EXPONENT FRACTIONARY IV”:

The case $(a + b)^{1'5}$ can be solved using the following trick:

We assume that N° Terms: $2'5$, $\sum coeff.: 3$, $\sum exp.: 4$ as already said in before tables in “Binomials with exponent fractionary IV”.

So: proportion terms: 1 2 1 taken from $(a + b)^2$

Terms: $2'5$ we can try:

terms

$$\begin{array}{ccccc} 0'7 & 1'4 & 0'35 & 0'7+1'4+0'35 \sim 2'5 \\ \underbrace{\hspace{1.5cm}} & \underbrace{\hspace{1.5cm}} & \underbrace{\hspace{1.5cm}} & & \\ & \times 2 & \times 0'5 & & \end{array}$$

We suppose that the coeff. and the exp. change at the same proportions as the proportion of terms.

$$\begin{aligned} \sum coeff.: 3 &\rightarrow 2'5 \rightarrow 3 \\ 0'7 &\rightarrow x \quad x = 0'8 \\ 1'4 &\rightarrow y \quad y = 2 \\ 0'35 &\rightarrow z \quad z = 0'2 \end{aligned}$$

Whereas the $\sum exp.: 4 \rightarrow$ the same: $2'5 \rightarrow 4$

$$\begin{aligned} 0'7 &\rightarrow a \quad a \sim 1'1 \\ 1'4 &\rightarrow b \quad b \sim 2'1 \\ 0'35 &\rightarrow c \quad c \sim 0'8 \end{aligned}$$

Then, as before in article “Binomials with exponent fractionary IV”:

$$(a + b)^{1'5} = 0'8.a^{1'1} + 2.a^{1'05}.b^{1'05} + 0'2.b^{0'8} \quad (?)$$

Time will decide!!!