

How would the author

106

why pascal triangles are not good

pascal did find it

$$\text{pingala } \binom{n-1}{r} + \binom{n-1}{r-1}$$

③ third power formula
$$\frac{n!}{k!(n-k)!}$$

④ That prove $\neq 2$
$$\sum_{k=0}^n \binom{n}{k} = 2^n$$

$$m \ 2 \ 4 \ 4 \ 2^3 = 2/3 \approx \pi$$

$$\int_{-\infty}^{\infty} \frac{1}{\sqrt{2\pi}} e^{-x^2/2} dx = 1$$

$$\frac{1}{\sqrt{2\pi}} \int_{-\infty}^{\infty} e^{-x^2/2} dx = \text{erf}(\infty/\sqrt{2}) + \text{erf}(-\infty/\sqrt{2})$$
$$\frac{2}{2} = 1$$