Integralgrenzwertsatz von DE MOIVRE-LAPLACE

$$\lim_{n \to \infty} \frac{B(a \leq X < b; n, p)}{\frac{1}{\sqrt{2\pi}} \cdot \frac{1}{\sqrt{n \cdot p \cdot (1-p)}} \cdot \int_a^b e^{-\frac{1}{2} \frac{(t-np)^2}{n \cdot p \cdot (1-p)}} \, dt} =$$

$$\lim_{n \to \infty} \frac{B(a \leq X < b; n, p)}{\tilde{\Phi}(b) - \tilde{\Phi}(a)} =$$

$$\lim_{n \to \infty} \frac{B\left(\tilde{a} \leq \frac{X - n \cdot p}{\sqrt{n \cdot p \cdot (1-p)}} < \tilde{b}; n, p\right)}{\Phi(b) - \Phi(a)} = 1$$