Financial Mathematics

Stirling's Formula

0050-1.

Using Stirling's formula, find constants

$$C,\ k \text{ and } b$$

such that

$$\binom{7n}{4n} \sim C(n^k)(b^n),$$

i.e., such that

$$\lim_{n\to\infty} \left[\binom{7n}{4n}\right] \left[C(n^k)(b^n)\right]^{-1} = 1.$$