

Here is a fact from calculus, which is one of the oldest definitions of the mathematical constant e (it was first noticed by Jacob Bernoulli in 1683 in studying compound interest):

$$\lim_{n \rightarrow \infty} \left(1 + \frac{1}{n}\right)^n = e$$

Starting from this, what can we say about

$$\lim_{n \rightarrow \infty} \left(1 + \frac{c}{n}\right)^n$$

if c is some real number?