If $X_1, \ldots, X_n$ are independent and identically distributed (i.i.d.) random variables such that $\mathbb{E}[X_i] = \mu$, then, for any $\varepsilon > 0$, it holds that:

$$\lim_{n \to \infty} \Pr\left[\left|\frac{X_1 + \cdots + X_n}{n} - \mu\right| < \varepsilon\right] = 1.$$