Неравенство Чебышёва

$$P\left(\left|\frac{S_n}{n} - \mu\right| \geq \varepsilon\right) \leq \frac{DS_n}{n^2\varepsilon^2}$$

$$P\left(\left|\frac{S_n}{n} - \mu\right| \leq \varepsilon\right) \geq 0.95$$

$$\Rightarrow P\left(\left|\frac{S_n}{n} - \mu\right| \geq \varepsilon\right) \leq 0.05$$

$$\Rightarrow P\left(\left|\frac{S_n}{n} - \mu\right| \geq \varepsilon\right) \leq \frac{DS_n}{n^2\varepsilon^2} \leq 0.05$$

$$\frac{DS_n}{n^2\varepsilon^2} \leq 0.05 \Rightarrow \frac{D\xi}{0.05n} \leq \varepsilon^2 \Rightarrow \varepsilon \geq \sqrt{\frac{D\xi}{0.05n}}$$