

$$2) \quad n = 500$$

$$E[X] = \frac{7}{2} \quad \text{VAR}(X) = \frac{35}{12}$$

$$Y = \sum_{i=1}^{500} X_i \quad \text{PŘIBLIŽNO NORMALNO PORAZDEJENJO}$$

$$E[Y] = 500 \cdot \frac{7}{2} = 1750$$

$$\text{VAR}[Y] = 500 \cdot \frac{35}{12} = 1458.33$$

$$P[\text{VSOTA ŠTĚVILA PIK VĚDĀ OD 1800}] \approx P[Y > 1800.5] =$$

$$= P\left[U > \frac{1800.5 - 1750}{\sqrt{1458.33}}\right] = P(U > 1.322) = 1 - P(U < 1.322]$$

$$= 1 - 0.9069 = \underline{\underline{0.0952}}$$