$z \geq m_0$ $\quad m \leq m_0$ $\quad m = E(X)$ (Gauss) $\quad z = \frac{\overline{x_n} - m_0}{\sigma/\sqrt{n}}$

1) $X = [0,1,2,3,4,5]$, $Y = [0,0,1,2,3]$

a - perm aleatoare a lui x, b, c - perm aleat indep a lui y

a) $P(\{a = [5,1,2,3,4,0]\})$ b) $P($„c(1) - nr menul 4") c) z - v.a. def astfel $P(Z=-1) = P($„c(1) - nr par"), $P(z=1) = P($„c(1) - nr impar"), $E(Z) = ?$

d) $P(\{b=[3,1,2,0,0]\} \cup \{c=[3,0,1,2,0]\})$

e) E adev că $\{b=[0,3,1,2,0\}$ și $\{c=[3,0,1,2,0\}$ nu au aceași prob?

2) y_1, y_2, y_3, y_4, y_5 - date sl. pt Y dep de $p \in (0, 0.5)$

$P(Y=-1) = 0.5 - p$, $P(Y=0) = p$, $P(Y=2) = 0.5$

met mom, $E(Y) = 0.9$

3) U, T. v.a. indep cu aceași $f: \mathbb{R} \to [0,\infty)$ $f(u) = \begin{cases} 3u^2, & u \in [0,1] \\ 0 \end{cases}$

a) $F_U(u)$, $u \in [0,1]$ și $F_T(u)$, $u \in [1,3]$

b) $P\left(U \leq \frac{1}{2}, T \leq \frac{3}{2}\right)$

c) $E(5U^2 - 4T)$